

Inside the City in the Greek World

Studies of Urbanism from the Bronze Age
to the Hellenistic Period



Edited by

Sara Owen and Laura Preston

University of Cambridge Museum of Classical Archaeology Monograph no. 1

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1 Introduction: Inside the City in the Greek World

Laura Preston and Sara Owen

Ancient cities in the Greek world have long been a focus of archaeological investigation. But until relatively recently they have tended to be described rather than analysed. Traditional approaches have seen them more as collections of architecture than as social spaces – despite the observation that, in the historical period at least, “the city was essentially a community of citizens” (Owens 1991, 1. cf. Rider 1916; Wycherley 1949; Graham 1962; McEnroe 1982). During the past three decades, the ascendancy of intensive field survey in the Aegean has seen a shift in emphasis, with increasing attention devoted to the interactions of ancient urban systems with their surrounding landscapes (see *e.g.* de Polignac 1984; 1995; Osborne 1987; Davis and Cherry 1990; Rihill and Wilson 1991; Rich and Wallace-Hadrill 1991; Snodgrass 1991; Watrous and Blitzer 1999; Bevan 2002; Watrous *et al.* 2004). These developments have provided a long-needed contextualisation of central sites within their broader social and economic worlds, as well as challenging traditional archaeological preoccupations with cities, sanctuaries, villas, elites and other perceived trappings of ‘civilisations’ within different periods. But these valuable broader perspectives need to be complemented by ongoing study of the *internal* organisation and dynamics of urban sites.

Within archaeology more generally, the ways in which people lived in and moved through past rural landscapes have recently become a major focus of investigation (*e.g.* Tilley 1994; Edmonds 1999; Bender and Winer 2001). It is notable that when these approaches and methodologies have been extended to the built environment of settlements, case studies from the (historical) Greek world have been prominent in representing the specific category of urban sites (*e.g.* Jameson 1990a; 1990b; Nevett 1994). In fact, the study of intra-urban space as a means of exploring social relations and identities in the ancient Greek world is now starting to burgeon (as indicated by Westgate *et al.* 2007); yet there is still far to go in realising the full potential of this resource.

The present volume is the product of a conference that took place at the Faculty of Classics, Cambridge, in May 2004. The papers range in period from the Bronze Age to the Hellenistic era, and in space from Italy to Beirut. The title of this volume thus incorporates two (only partially overlapping) meanings of ‘Greek’: the territory of the modern nation-state, and areas of the ancient world with cultural influences from the Aegean. The volume weaves through this large time-range of different societies and cultures, addressing different

types of evidence and embracing a variety of spatial scales from the individual household to the broader cityscape (including its mortuary components). The uniting thread of the articles is that they analyse ancient urban centres from *within*, exploring some of the ways in which people lived in, perceived and modified their built environments. But equally, despite this common thread, the extended diachronic and spatial ranges encapsulated in the conference were intended not only to facilitate the exchange of ideas, but also to allow the diversity of ancient urban forms to be recognised.

Any book about urbanism needs to begin with definitions. It is tempting to adopt a 'know it when you see it' approach, but this is to assume that all ancient 'urban' configurations will coincide with modern European conceptions of what a town should look like. Appropriate criteria for identifying urban settlements have been debated for both the prehistoric and historic periods (*e.g.* for the former, Konsola 1986 and 1990; Polychronopoulou 1990; van Effenterre 1990; Schallin 1997; Bintliff 2002; and Whitelaw 2004, esp. 161–3; and for the latter, Morris 1991; Snodgrass 1991; Morgan and Coulton 1997; Osborne 2005). The two criteria conventionally used to identify a site as urban in fact often coincide (Morgan 2003, 54–5). The first is unusually large site size. In the prehistoric period, geographical area conventionally provides the empirical base point for inter-site comparisons, with population estimates then extrapolated from this (the most detailed and culturally sensitive studies have been carried out by Whitelaw 2000; 2001; see also Renfrew 1972, 250–1; Wagstaff and Cherry 1982, 139–40; Branigan 2001, 45–8; Bevan 2002, 244–6). For the historic period, calculations on the basis of geographical area, using archaeological data (*e.g.* Snodgrass 1977; Cherry and Sparkes 1982, 144; Whitelaw and Davis 1991, 278; Hansen 2006, 74), have been supplemented by population estimates drawn from textual sources (*e.g.* Hansen 1997). The second criterion for urbanism is specialized function, which is defined in terms of diversity of activities and the existence of centralised (administrative) authority within the centre. Both criteria are often linked with significant social hierarchy in the settlement, although evidence of hierarchy is not a criterion for urbanism by itself (see *e.g.* Morris 1991; 2006).

These criteria for urbanism are especially suitable for the Bronze Age and the Classical-Hellenistic periods; however, whether we look at site size or types of centralized authority, significant levels of variation are apparent both diachronically and synchronically. In terms of scale, Minoan palatial centres on Crete, which are usually characterised as 'urban' by default, vary from *c.* 4ha at Neopalatial Gournia up to 60–80ha at Neopalatial Knossos (Whitelaw 2001, 29 fig. 2.10); the size range for Mycenaean palatial sites on the mainland was much smaller (with the largest, Mycenae, at a maximum of *c.* 40ha – Whitelaw *ibid.*). In the Classical and Hellenistic periods the range is broader, with sites such as Halieis, at *c.* 16ha, towards the lower end of the scale (Ault 2006) and Athens, whose fifth century walls enclosed *c.* 215ha, at the upper (Morris 2006, 42–3). In terms of the organisation of centralised authority there is again significant variation. Within the Bronze Age, as discussed below, the Mycenaean states are generally characterised as monarchic bureaucracies, but identifying the elite structures within the monumental 'palace' and 'villa' complexes of

Minoan Crete is more contentious. Much later, the Classical period witnessed an eclectic range of tyrannic, oligarchic and democratic regimes based around *polis* ('city-state') and *ethnos* organisational frameworks (Ehrenberg 1969; Morgan 2003), which were widely usurped by monarchies of varying scales in the Hellenistic era (W. Adams 2006).

Despite the high levels of variation in the Bronze Age and Classical examples, they are generally agreed to be 'urban' in character. These criteria for urbanism are more contested and more complex in discussions of the Early Iron Age ('EIA') and Archaic periods. For the former, the question of whether urbanism even existed is an open one. Some large settlements do appear, but they mainly consist of loose associations of villages over large areas (Snodgrass 1980; 1991; Morris 2006, 35). In this context, different criteria have been emphasised in defining urbanism. On Morris' definition, there were very large groupings of population which saw themselves as single communities and were of sufficient size to have had significant social hierarchy. However, they should not be considered urban until they had evidence of specialised activities and centralised authority (*e.g.* craft activity and an agora), and such centres did not emerge until the sixth century BC (Morris 1991; 2006). By contrast, Osborne's "minimalist" definition of urbanism "in terms of relative population size and density" could admit several EIA sites to this category (Osborne 2005, 8–9) – though we would note that high density of settlement, and conceptions of settlement unity across these large population conglomerations, have not yet been demonstrated archaeologically, even for Lefkandi.

For the Archaic period too, the accumulating archaeological evidence has failed to conform to expectations of typical urban characteristics which have been applied retrojectively from the Classical era (see also Morris 1991, 40). Morgan and Coulton (1997), in an important article on the subject, have demonstrated that the evidence for Archaic urban centres is sparse, while de Polignac (in a paper given at this conference, and subsequently published as de Polignac 2005) has shown how diverse and scattered the evidence is for settlement activity in many Archaic sites once the reassuring framework of the Classical city wall is removed. De Polignac does not, however, argue that these scattered settlements are non-urban; instead he suggests that the scattered structure reflects the new communities' priorities – specifically their focus upon the acquisition of differing resources (see the further discussion in Owen, this volume).

In organising the conference, since our aim was to encourage diachronic and spatial comparison, we sought to incorporate rather than exclude variations and to encourage broad parameters of classification, inviting contributors to apply their own definitions of what is 'urban'. Indeed, rather than relying on universal standards, with criteria simply transposed from one area of the discipline to another or based upon a checklist of features such as those of Childe (1950) and Weber (1966), we would argue that it is important to allow parameters to be set according to the nature of the research questions being asked, if this term is to continue to be analytically useful in Aegean archaeology. As Whitelaw has observed regarding one definition of Bronze Age urbanism, "All of the defining characteristics are relative rather than absolute, but the principal value of such a definition is not in providing a classificatory tool, but rather in focusing attention on

general characteristics relevant to understanding specific cases” (2004, 161). Similarly, for the first millennium BC, Osborne argues that “urbanization is a phenomenon which admits of degrees – a settlement can be more or less urbanized – and it is important that we pitch our threshold in the right place to enable the instances that we are interested in to appear on the scale” (2005, 7). The identification of urban sites is, therefore, less an end in itself and more a means of defining culturally specific parameters for exploring relevant social and political questions, including internal variations within a given society.

In order to pursue this and other themes further, it is useful at this point to turn to the papers themselves within the present volume, and briefly outline the analyses presented in each. The arrangement of the papers generally follows the chronological sequence of the evidence under study.

An important prologue to the papers by Knappett, Driessen and Schoep is to highlight a recent interest in re-examining the (still vexing) question of how political power was organised in Minoan states. Cases have been presented for ‘corporate societies’, ‘heterarchy’ and ‘factionalism’ as useful concepts for exploring power dynamics (by Driessen, Schoep and Hamilakis respectively, in the conference proceedings of Driessen *et al.* 2002; see also Schoep 2000b). Some of these interpretations have been contested (*e.g.* Warren and Betancourt, both also in Driessen *et al.* 2002), and arguments presented for the existence of monarchical systems. Whatever the organisational structure(s) in place at the different palace centres (and variation should perhaps be anticipated), the suggestion which a number of these theories raise – that political order was both complex and fragile in these early states – is not unconvincing (*cf.* Yoffee 2005) and deserves further exploration.

Knappett discusses the structural re-organisations attendant on Minoan state formation in the early second millennium BC, suggesting that kinship ties, a fundamental unit in power structures of less complex societies, could survive demographic growth and increasing complexity to remain key functional and ideological mechanisms in early state societies, since “as the scale of a social system increases, existing organisational forms may actually be able to cope by ‘scaling up’” (p. 15). It is proposed that more investigation is needed of the political structures of early states, which potentially involved combinations of the ‘top-down’ hierarchies traditionally assumed in Aegean prehistory with ‘bottom-up’ heterarchies based around scaled-up family structures (that is, extended families or even ‘clans’) (see also Schoep and Knappett 2004), with the latter possibly represented by extra-palace urban villas at Malia and Palaikastro (*cf.* Driessen 2002, 12).

Schoep’s paper then addresses the issue of urban diversity on Crete in the Protopalatial period, arguing that the occurrence of similar palace structures (or ‘court buildings’) at Knossos, Phaistos and Malia, which are widely assumed to be the central nodes of independent state systems, “does not automatically imply a similar or identical degree of socio-political complexity and organisation of the settlement and the region around it” (pp 27–8). The paper highlights scalar disparities between Phaistos and Malia, as well as differences in the biographies of the court buildings and in the broader distributions of elite groups, all of which demonstrate the need to study urban centres and the dynamics of power relations within their specific regional contexts. It should be noted that such

regionally specific approaches are also being developed for the subsequent, Neopalatial, period on Crete (*e.g.* E. Adams 2006; a further paper, comparing Neopalatial palace entrance systems at Knossos, Malia, Phaistos and Zakro, and presented at the conference, has been published as E. Adams 2007).

Driessen takes a phenomenological approach to Minoan socio-political structures in the Protopalatial and Neopalatial periods, analysing architecture as a medium which structured agency, experience and social interactions (*cf.* also E. Adams 2007). The importance of the built environment in creating 'places' and mediating social relationships is widely appreciated (*e.g.* Rapoport 1982; Kent 1990; Parker Pearson and Richards 1994), and there still remain many aspects of social interaction and identity to explore in the Greek world. Developing previous arguments that the Cretan palaces were ritual and administrative bases used by non-resident groups (Driessen 2002), this paper proposes that within a number of regional centres (of varying sizes), the courts and entrances of palaces or other focal buildings functioned as 'interface zones' for such groups. Raised walkways led through the urban environment to these open areas, forming 'processional ways' that guided extra-urban visitors; the courts (and the raised walkways within them) then formed structured arenas for the performance of 'integrative' rituals which reinforced social and ideological bonds between inhabitants of the centres and the surrounding territories.

Our understanding of urbanism in Bronze Age Crete is still incomplete – in particular, as Schoep has observed (2002a, 32), "further understanding of how Neopalatial society was organised and the role played by the court-centred buildings can only be achieved through a closer characterisation of social dynamics outside these buildings in other segments of society, particularly the under-explored urban environment". The investigation of further (and particularly non-elite) structures will play an important role here, as will the incorporation of new methods of spatial analysis, as, for example, in Cunningham 2007 and Romanou 2007 (*cf.* also Sanders 1990), as well as Driessen (this volume) and E. Adams 2007.

Investigation beyond the palace complexes (where such exist) is equally desirable for the 'Mycenaean' urban centres of the Late Bronze Age Greek mainland and Crete. This is being facilitated considerably by the integration of data from diverse individual fieldwork projects (as provided by Iakovidis and French 2003 for Mycenae), the application of survey methodologies to urban landscapes (as at Pylos – Bennet 1999; Davis *et al.* 1999; Bennet and Shelmerdine 2001) and, where possible, continuing excavation (as at Tiryns – Whitley *et al.* 2007, 21–2 on recent work; *cf.* also Dakouri-Hild 2001 for Middle Helladic Thebes). Here the existence of centralised, monarchic hierarchies at the palatial centres is widely accepted on the basis of the textual evidence – the *wanax* of the Linear B texts of at least three polities (Pylos, Thebes and Knossos) (Chadwick 1976, 70–1) – and also the closed circulation patterns of the palaces which channel movement towards the megaron and throne at the palace core (Driessen 2002, 4–5). This does not, of course, exclude the possibility of internal elite tensions within the Mycenaean palatial centres, a topic which does, indeed, warrant further investigation (*e.g.* Burns 2007), but we do receive a picture of centralised elite control from evidence beyond the palaces as well as within them, for

example in the circulation of prestige goods (Voutsaki 2001) and funerary investment (Voutsaki 1995; 1998).

French develops this research through an analysis of urban planning at Mycenae, the largest of the mainland palace centres, arguing that both its mortuary and settlement landscapes are indicative of increasingly centralised control during the palatial period. It is proposed that a generally careful spatial distinction was maintained between the living and dead in the thirteenth century BC, which may be suggestive of a centralised “deliberate regulation of land usage” (p. 58). Centrally organised construction work in this period, within and beyond the palace, includes the refurbishment of Grave Circle A, maintenance of the road network, and a water control system. These points have important implications for understanding how the Mycenaean elite displayed its authority and demonstrated its resources by transforming the inhabited environment, including control of (skilled) labour, of routes of movement between centres, and of the mortuary landscape, including the ideologically powerful dead of Grave Circle A (cf. Wright 1987).

It has long been recognised that the collapse of the Mycenaean state systems (c. 1200 BC) had different political and demographic impacts at different sites (for example, on the basis of their relationships with the former palace centres – Foxhall 1995). Building on these “broad brush-strokes” of analysis (Foxhall 1995, 249), more detailed, individually-specific site histories are becoming increasingly available for the Bronze-Iron Age transition, to allow this complex phenomenon to be analysed at micro-scale levels. Lemos, Livieratou and Thomatos highlight the different trajectories that elite groups could follow by focusing on the fluctuating settlement configurations at two specific sites – Tiryns in the Argolid and Koukounaries on the island of Paros. Setting out in detail the available settlement evidence for each from the final phase of the Bronze Age (Late Helladic IIIC) through to the Archaic period, this study also highlights the importance of considering a variety of factors – including elite agendas, the sites’ geographical locations and political developments in their broader regions – in investigating their declines (one feature they shared was that neither became a state centre in the Archaic-Classical periods).

Owen pursues a related theme in an analysis of Thasos, an Early Archaic Greek colony, emphasising that a variety of factors contributed to the internal configurations of colony sites. In particular she suggests that explanations for diversity in the forms of Archaic larger-scale sites should be sought at least partly in pre-existing (Early Iron Age) configurations of the inhabited landscape, not least in colony sites where indigenous habitation preceded the Greek foundations, as at Archaic Thasos. This also raises the important issue of cross-cultural interactions and their role in the development of urban space, a theme that is also found in Nevett and Boksmati (below).

It could be argued that as well as the emerging picture of diversity among Archaic centres, a question mark also hangs over the validity of the Classical template of urbanism, which is based upon a relatively small sample of excavated sites (Morgan and Coulton 1997, 87; Hansen 2006, 100); here the contrasting physical landscapes of the ‘archetypal’ *poleis* of Athens and Sparta should also give us pause (Cartledge 2001, 13–20; Whitley 2001, 166, after Runciman 1990, 348). This issue is pursued by Snodgrass from a mortuary

perspective, which highlights the potential of burial for exploring social identities and organisation in the historical periods (and demonstrates that this does not necessarily involve moving outside the 'settlement' context). Snodgrass addresses several assumptions (which partially derive from an Atheno-centric perspective) regarding the existence of universal Greek customs in burial eligibility and in cemetery location and layout, assumptions that data are increasingly challenging. He argues that more refined spatial resolution is needed in exploring social relations based around such identities as age, lineage and citizenship, as burial 'norms' actually clustered and shifted around local-level, and at least partially internally focused, socio-political developments.

As one moves further into the first millennium, an increasing emphasis can be noted in the recent archaeological literature on analysing social relationships such as gender or household membership, especially as expressed through the arrangement of domestic architectural space and activities. This research area has burgeoned particularly over the past decade for the Archaic to Hellenistic periods (*e.g.* Walker 1983; Jameson 1990; Ault and Nevett 1999; Goldberg 1999; Nevett 1999; Cahill 2002; Ault and Nevett 2005; Foxhall 2007; Nevett 2007; Trümper 2007); it is also being more actively pursued for the Early Iron Age (*e.g.* Coucouzeli 2007), which complements a longer-term archaeological interest in the development of religious ritual space in this period (*e.g.* Drerup 1969; Mazarakis Ainian 1997; Prent 2007). Settlement configurations more broadly have also been analysed within EIA to Hellenistic settlements, with a particular emphasis on the principles underlying settlement layout in terms of social organisation and political ideologies (Cahill 2002; Lang 2007; Mazarakis Ainian 2007; Osborne 2007; Sjögren 2007). Greco, in a profitable integration of textual and archaeological evidence, discusses orthogonal city planning, often referred to as 'Hippodamian', examining the Classical colony of Thourioi in southern Italy, an urban layout "which incorporates new and unprecedented principles of regularity and symmetry" (p. 116). He points out, however, that more complex factors than just architectural ideals should be considered in exploring the physical organisation of such newly founded settlements, including interactions between architect and community, as well as the possible influence of existing settlement configurations – excavation has so far determined that in the area where Thourioi overlaps with the earlier (EIA) centre of Sybaris, there is at least partial repetition in street orientation, as was again repeated in the later Roman colony of Copiae at this site.

Nevett's article in this volume also discusses the streetscapes of ancient cities, but from a phenomenological perspective. Using the case studies of Olynthos, Halieis and Delos, she considers façades of domestic buildings in the Classical to Roman periods, and demonstrates that exterior decoration is a relatively untapped, but potentially rich resource for investigating social relations. At Olynthos and Halieis, the use of dressed blocks on prominent exterior walls, and in prothyra and interior courts, is discussed as a strategy for status display by the household; at Delos, a still richer repertoire is available for analysis, including stone relief, stucco plaster decoration and possibly also painted images, which possibly functioned to communicate not only status but also cultural identities.

This theme of cultural interaction links with the main focus of Boksmati's study of

Hellenistic Beirut, where the impact of the 'Hellenised' Seleucid dynasty is reassessed. An analysis of several districts of the city is used to argue for stronger elements of cultural and organisational continuity than have often been recognised – *i.e.* that the particular plan of Beirut gradually emerged over several hundred years and was the product of the social and cultural priorities of the inhabitants, rather than of a single period of 'Hellenisation'. A more complex reconstruction of local identities is advocated, within and beyond the household, which involved active negotiations of new commodities and ideas by different groups within the city.

This volume thus draws together a wide variety of perspectives from Minoan Crete to Hellenistic Beirut, incorporating a broad range of peoples, periods and social configurations. Despite this diversity, significant themes recur: the importance of tracing the gradual development of individual urban forms within specific social and cultural milieux; how these urban environments were experienced and/or used by elites as control mechanisms; the importance of understanding social relations, and the role of the study of the city (and its burials) in revealing these dynamics. Most importantly, to observe that a settlement has cult spaces, areas of craft production, roads and houses etc. is merely to describe it. It is how these elements were put together, used and lived that is really crucial to the understanding of the societies that created them.

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2 Scaling Up: From Household to State in Bronze Age Crete

Carl Knappett

Some people think that the qualifications of a statesman, king, householder, and master are the same, and that they differ, not in kind, but only in the number of their subjects. For example, the ruler over a few is called a master; over more, the manager of a household; over a still larger number, a statesman or king, as if there were no difference between a great household and a small state.

...But all this is a mistake.

Aristotle: Politics Book I, 1 1252a 7–18

This paper takes an oblique approach to the theme of urban systems by examining the relationship between organisational forms that occupy different scales either side of the urban: the household and the state. In that they fall at opposite ends of the size spectrum, it should perhaps come as no surprise that many commentators, not least Aristotle, consider these two institutions to have little in common. Certainly, what is clear in the quotation above is that scale is seen to matter greatly, such that two social units of such widely differing scales ought not to share many organisational features. However, this key relationship between scale and social organisation is too often assumed rather than investigated. In this paper I set out to explore this relationship, with the aim of shedding a little light on the processes through which household, city and state may have developed successively as organisational forms. My particular focus will be on the development of palace, town and state in Bronze Age Crete.

Let us begin by sketching out the orthodox position, which we may caricature loosely as the ‘phase transition’ approach. Over the long term, it is posited that social systems increase in scale. Existing social units, which have developed for a certain scale and population, are placed under stress by this expansion. They continue to absorb the pressure until at some critical threshold they can no longer cope. We might imagine one such basic social unit to be the household, which might only be able to expand up to a certain population threshold, at which point the overall system adjusts through a radical restructuring. New higher-level units may emerge to cope with the increase in scale.

This model is implicit across many studies of early social and political organization. It is certainly fundamental in studies of socio-political evolution in Bronze Age Crete. For example, the sheer size of a site like Knossos in the Early Minoan period (in the third

millennium BC) has been taken as a sign that it must have been organized along quite different lines to a small village site like Myrtos Fournou Korifi (Whitelaw 1983, 340). Scale predicts complexity: whereas the organizational unit at Myrtos appears to be the household, the implication is that this is unlikely to be the case at Knossos. Its greater size is taken to imply that some other organizational unit must have been in operation for a settlement of such a scale to function. Furthermore, at the turn of the second millennium BC there is a significant increase in the scale of social systems at all levels: the palaces represent a new scale of monumental central building, settlements grow larger than ever before (*e.g.* Hood and Smyth 1981, showing a peak in urban size of Knossos in Middle Minoan IA (*c.* 2000–1900 BC); see also Manning 1999; Haggis 2002; Whitelaw 2004), and regional groupings, in the form of state polities, are unprecedented in their spatial extent. The implication is that some major organizational changes must have occurred to accommodate this scalar expansion.

However, another model exists that has not been afforded much attention, at least not in the context of the prehistoric and historic Aegean. As the scale of a social system increases, existing organisational forms may actually be able to cope by ‘scaling up’. Organisational change is continuous and gradual, unlike the abrupt ‘phase transition’ sketched out above, with structures relatively ‘scale invariant’. For example, studies in urban geography have shown that the city is a form that can exist at a wide range of scales, from ten thousand inhabitants to ten million (Pumain 1998; 2004). City sizes are not distributed at random, but follow a strict statistical law within a given territory: the largest city in a territory will be twice the size of the next largest, and three times the size of the third largest. For example Pumain (citing Moriconi-Ebrard 1993) states that there are about 23,000 cities of >10,000 inhabitants in the world, about 2000 larger than 100,000, and 200 above one million in population. This regularity – an inverse geometric progression between the population of a city and its rank – is known as Zipf’s rank-size rule (Zipf 1949). What is interesting for current purposes is that organisation can be maintained with similar structures across several scales or magnitudes. Indeed, there is a growing body of work on the fractal organisation of cities (Batty 2005). The repetition of structure across a range of scales is also referred to in some of the recent literature in complexity theory as ‘scale freedom’ or ‘scale invariance’ (Barabási 2002).

Observing the existence of rank-size distribution and scale invariance is not the same as explaining them (Johnson 1981; Pumain 2004). Zipf’s law has been known since the 1940s, but urban geographers still do not fully understand its underlying processes. One factor preventing a fuller understanding of social scaling processes is the tendency to focus on just one organizational level: why not look at households, villages, towns, cities and states, rather than just cities? It may be that organizational structures are carried across many different levels. It is akin to focusing solely on mammals in studies of structural principles in biology, when in fact recent work has shown deep similarities in organisational structure across an incredible size range, from the smallest microbes to the largest vertebrates (West *et al.* 1997; 2002). In particular, West and his colleagues have identified a fundamental scaling relationship connecting the mass of the organism to its metabolic rate, one that applies across 27 orders of magnitude, from unicellular to multicellular organisms.

The idea of social scaling may be worth exploring in the context of Bronze Age Crete. Taking the example of Malia in the First Palace Period (c. 1900–1750 BC), there are different spatial and social units: household, town complex, palace, and state. Clearly these differ in scale, and we tend to assume as a corollary that each level is also organisationally distinct. However, the ‘higher’ organisational levels must to some extent have developed after the lower ones; there were, after all, households throughout the Neolithic and Early Bronze Age on Crete, but no towns or states. It is rarely imagined, though, that towns and states developed ‘out of’ more fundamental social units such as the household. Indeed, the processes through which they did emerge are not given much attention at all. By devoting some thought to the possibility of a process of scaling up from household to state, we are at the very least exploring the interlinkages between different organizational levels, and perhaps thereby providing a few insights into the evolution of urban entities and other complex organizational forms.

Scaling up in archaeology

Some hints of such an approach can be gleaned from some of the recent archaeological literature. The term ‘scaling up’ is itself sometimes used although only in passing. Sherratt, for example, describes it as “the enlargement of institutions by analogy with an existing model, such as the household or family” (Sherratt 1995, 15). He goes on to suggest that “temples in the ancient world were literally the households of their deities” (Sherratt 1995, 15). While Sherratt has the Near East in mind, similar thoughts have been expressed in a Mesoamerican context: for the Maya it has been argued that “temple plaza groups and large centers are simply enlarged versions of the mortuary shrine complexes of local patrilineages” (Fox *et al.* 1996, 799). The concept of scaling up is also used, albeit somewhat loosely, in the work of Kus and Raharijaona (2000) on the early Merina state in Madagascar, in an article entitled “House to Palace, Village to State: Scaling up Architecture and Ideology.”

But without doubt the one contribution that deals most extensively and explicitly with this theme of scaling up is Schloen’s work on patrimonialism in the ancient Near East (Schloen 2001). Schloen’s approach, both innovative and yet rooted in Weberian interpretive social theory, tackles the thorny issue of the relationship between higher and lower order organizational forms within societies. He challenges the prevailing wisdom that the transformation from tribe or chiefdom to state sees the replacement of kin-based structures by class-based ones. This follows from the assumption widely made that all states are bureaucratic and ‘rationalised’ in nature; our own states might be, as may those of ancient Greece and Rome, but this need not extend back to the Bronze Age. Weber, for example, differentiated between bureaucratic states on the one hand and patrimonial states on the other: in the former, government is based on impersonal ties and elites are autonomous, while in the latter, government operates through personal, kin-based ties, and elites are embedded (see also Eisenstadt 1979). For various reasons, not least Weber’s wide use of the term patrimonialism (*e.g.* in association with feudalism), Schloen chooses to limit its use to “truly patrimonial regimes” in which household membership is the

defining feature (Schloen 2001, 52). In so doing he coins the term 'Patrimonial Household Model', in order to avoid the confusion that might arise when 'patrimonialism', as more generally conceived by Weber, is associated with feudalism or the hybrid form 'patrimonial bureaucracy'. Thus Schloen's model depicts the household as the main organizing principle in many ancient societies, especially those of the Bronze Age Near East and Mediterranean that predate the emergence of rationalized bureaucracies in the first millennium BC.

The Patrimonial Household Model allows us to see the processes that might be involved in scaling up. As a society grows in scale, the household is used as a basic organizational building block with which to elaborate higher levels in the social hierarchy. There need not be "a qualitative transformation from a personalised kin-based society to an impersonal 'state', as functionalist researchers assume" (Schloen 2001, 70). Each level in the hierarchy is organized along the same principles of household relationships, until ultimately the state as a whole can be conceptualized as a grand household of households, headed by a patriarchal figure. In this way a fractal, scale invariant pattern is created.

This idea of fractality is picked up by Lehner in his paper "Fractal house of Pharaoh", examining the scaling up of household organization in ancient Egypt (Lehner 2000). He draws extensively on Schloen's Patrimonial Household Model in elaborating his ideas. The ancient Egyptian state may give the appearance of being a heavily centralized, top-down system, but Lehner highlights the periodic fragmentation that occurs (witness the 'Intermediate' periods). This cycle of consolidation and dissolution is suggestive of a segmental or modular structure, one in which building blocks can easily be added one upon the other at ever increasing scale, but which also is prone to toppling over. Lehner argues that the building block or module in question is the household – a structure that could be scaled up to the highest level, so that the entire Egyptian state was a household of households (Pharaoh derives from the term for 'Great House'). At intermediate levels there existed large household estates throughout Egypt; temples too were organized along similar lines, as households of the gods.

Although Schloen touches on ideas from complexity theory within his eclectic theoretical framework, they are more central to Lehner's approach. He treats Egyptian society as a complex adaptive system (CAS), examining processes of emergent order, self-organisation and scaling up. However, it is of note that neither scholar takes CAS further, into the domain of agent-based modeling; each is happy to use ideas from complexity theory in an entirely heuristic manner. Schloen is quite explicit about this, expressing the benefits that can arise from using complexity theory as a conceptual tool, as well as the dangers that can come with modeling and quantitative analysis (Schloen 2001, 58–9). Schloen is at pains to integrate insights from complexity theory into interpretive social theory, arguing the two to be compatible. As Tainter says in his critique of Turchin's mathematical work on state dynamics, "sophisticated mathematics will not improve naïve social theories" (Tainter 2004, 489; Turchin 2003).

One of the advantages of complexity theory is that it encourages the kind of bottom-up approach to social change that both Schloen and Lehner seek (see also Brown *et al.* 2005, on the occurrence of fractal patterns across a range of scales). The study of ancient states has long been dominated by a top-down perspective, a bias that these and other scholars

are increasingly keen to correct. Yet it seems that Schloen and Lehner overcompensate. Order may emerge entirely from the bottom up within an ant colony, but human social organization (*e.g.* an urban system) tends to work through both bottom-up and top-down processes. It is this *hybrid* nature of complex social systems that needs to be fully acknowledged. But how do we set about explaining the emergence of such hybridity? This is evidently a very tricky point, seriously under-researched. However, there are a few clues. It may well be that structures do scale up, but at some point new functionalities emerge that lead to top-down control hierarchies. A 'household' of several thousand does not have the same functionality as a household of five. To explore this further, I shall turn to the work of Johnson, van der Leeuw and others on organisational structures and information flow. The key is to tackle the process of scaling up as an organisational response not just to an increase of scale *per se*, but to an increase in the flow of *information*.

Decision-making and group size

The seminal paper in this regard is Johnson (1982), in which the relationship between scale and social organization is explored in terms of the fundamental dynamics of human interactions. He looks principally at small mobile social groups, and not households as such; but I am not aware of any studies that deal with household organization in a comparable fashion. His objective is to assess the ways in which these small groups process information in the interests of task-oriented decision-making. A very small group (two to three individuals) has a limited amount of information and limited scope for interaction; the group does not perform particularly well in decision-making and problem solution. As group size increases, there are definite pay-offs, but at some point a threshold is reached beyond which it is difficult to reach consensus (humans only have a finite capacity for processing information). This threshold seems to be around six.

Johnson goes on to point out that there are egalitarian human groups (without internal hierarchy) documented ethnographically that are far larger than six in number. !Kung San camps may range from *c.* 40 to *c.* 150 individuals, organized in egalitarian fashion. What is important here, however, is that not all of these individuals interact face to face; the interactions occur between 'basal organizational units'. In large dry-season camps these organizational units tend to be extended family groups (made up of nuclear families). In small rainy-season camps, the unit is the nuclear family. By extending the basal unit size (from nuclear to extended), the !Kung have a mechanism to allow for effective decision-making in larger aggregations. In camps of 40 people or so, the number of units stays beneath the threshold of six. Yet in some large camps, when the numbers reach 100–150, the number of extended families increases to *c.* 8–13. This is beyond the threshold for effective decision-making, and indeed it does seem that disputes are far more frequent in camps of this size. There is 'scalar stress'. It would seem that the problems faced in a camp of 100–150 composed of *c.* 10 extended families are akin to those that would be faced in a camp of 40 if the organization unit were the nuclear family (instead of being scaled up to the extended family).

The !Kung system could be described as segmentary, in which scaling up can occur when needed, with ‘scaling down’ or fissioning also very easy when moving from dry-season to rainy-season. And despite being ‘egalitarian’, it does incorporate a hierarchy of sorts, what Johnson refers to as a “sequential hierarchy” (1982, 402). Decision-making is a bottom-up, consensual process: nuclear families have to reach consensus first, and then extended families, and then the community. This sequential hierarchy is quite different to the kind of hierarchy we are much more familiar with, what Johnson terms “simultaneous hierarchy” – a top-down process whereby decisions are made for the majority by a minority. Indeed, it is so different that we might struggle to think of a sequential hierarchy as a hierarchy at all.

How far can the scaling-up of sequential hierarchy proceed? Can it go to another level, that of the clan? It is noteworthy that in such cases there are also ‘Big Men’, who do exercise a degree of simultaneous hierarchical control – Johnson sees this as a hint that this may be the upper limit of sequential hierarchy for sedentary groups. Johnson notes that there do exist “informational economies of scale, but that these are difficult for non-hierarchically organized groups to exploit” (1982, 408). Clearly, having access to a wide range of information on resource availability could be extremely beneficial; yet a simultaneous hierarchy may be the only means of making effective use of such information, above a certain size limit.

But how does the shift from sequential to simultaneous hierarchy actually play out? Is it like a phase transition, whereby one kind of order is replaced by another structure of a quite different kind? Or should we instead see the two as somehow co-occurring, with simultaneous hierarchy complementing sequential hierarchy in some way? This seems to be what Johnson himself implies – “sequential hierarchies may not lose their importance with the development of simultaneous hierarchies” (1982, 414). Evidently we need to conceive of the complex systems emergent in such cases as hybrid entities in which two organizational logics are at work. Each by itself would be inadequate, but their respective advantages mean that together they form an effective system. Following Simon (1981), van der Leeuw has recently argued along similar lines, postulating that structure in complex systems (such as urban systems, states or empires) is generated by two fundamental processes – hierarchies and markets (van der Leeuw 2000; van der Leeuw and Aschan-Leygonie 2005). In this formulation, markets are seen as distributed, non-hierarchical organizations. It may be that ‘market’ is too specific as a term, but it should not be too problematic to replace it with a more abstract one, such as ‘heterarchy’ (see van der Leeuw 2000; and White 2003, for comments on Johnson 1982). It may be useful to replace Johnson’s term ‘sequential hierarchies’ with heterarchy as well.

Hierarchies, heterarchies and Bronze Age Crete

These alterations constitute a forward step in how we think of complex systems, with hierarchy and heterarchy interacting to create the organizational hybrids that are cities and states. Nonetheless, we are still faced with the very difficult questions of how hierarchy

emerges, and of how it interacts with heterarchy. Johnson's model shows that, at some scalar threshold, heterarchy alone no longer works as a means of decision-making. Structures may be scaled up from lower levels, but at a certain scale these higher level entities acquire new functionalities, with decisions taken to restrict the flow of information down to lower levels. It is a shift from a situation in which all participants have access to all information (and in which there is no control over information), to one in which only some parties have access (and in which the flow of information is controlled). This is what van der Leeuw has called, following Huberman, "processing under partial control".

Van der Leeuw's contribution is important because the substantial literature on information processing has barely been considered from an archaeological angle. Certainly, in studying early state organization few scholars have got to grips with the interactions between hierarchical and heterarchical processes. This is nowhere more true than in studies of the Bronze Age Aegean, where the recent introduction of ideas on heterarchy and factionalism has been achieved through the rejection of hierarchy (*e.g.* Hamilakis 2002; Schoep 2002). We do, though, need to keep hold of hierarchy alongside heterarchy if we want to grasp the nature of complex emergence (Schoep and Knappett 2005). Here I have sought to shed a little light on *how* an urban entity might evolve, through emergent scaling up as well as top-down processes; while the articulation of these processes clearly presents some difficulties, they are not insurmountable.

One advantage of the approach mapped out here is that it can deal with these interactions in a way that 'factions' alone cannot. We have the opportunity to examine the bottom-up processes through which different levels within social systems evolved. We can ask whether in Bronze Age Crete urban villas are households 'writ large', rather than entirely different organizational units. Likewise, we may question the relationship between villas and palaces: could the palaces themselves be scaled-up versions of the villas? And why not go one step further, and question the extent to which the early states of Bronze Age Crete may indeed be palaces writ large; perhaps even 'mega-households'? If these ideas can be sustained, we would certainly be provided with a mechanism for explaining the emergence of hierarchy and new organizational levels. Scaling up may retain structure across successively larger units, but scale also brings new functional possibilities. Decision-making may become more restricted, concentrated into fewer and fewer hands; perhaps the palaces could restrict the flow of information and consolidate their power. Although effective in terms of power, it may have been less ideal in terms of information processing, compromising the adaptability and long-term resilience of the overall system. Yet if urban villas, faced with the palaces squeezing them out of the informational loop, managed to open up cross-cutting, heterarchical channels of information flow, this may have limited the effects of palatial dominance.

The case of Malia, mentioned briefly earlier, is a good example from Middle Bronze Age Crete, as there are well-preserved households and town complexes alongside the palace (Pelon 1970; 1992; van Effenterre 1980; Poursat 1988; 1996). One of the most striking town complexes is known as 'Quartier Mu', a set of buildings covering more than 3000m² (Poursat 1992; Poursat and Knappett 2005). The two principal conjoined buildings, A and B, are flanked on three sides by seven smaller adjoining buildings, five of which are

workshops. These would appear to be 'normal' Minoan houses, each of *c.* 65–95m² (*e.g.* metalsmith's workshop = 65m², potter's workshop = 79m², sealstone workshop = 88m², South workshop = 93m²; Poursat 1996). These figures tally well with Whitelaw's calculations of house sizes in the Neopalatial period (*c.* 1750–1450 BC), particularly at Gournia; Whitelaw does not imagine there to have been much change in this from Prepalatial to Protopalatial (Whitelaw 2001, 19). When we turn to the main structure of Quartier Mu, Building A, it is approximately 900m², and thus larger in area than its surrounding houses by a factor of 10 (and note Building B is *c.* 450m²). While for this study I have not conducted a detailed architectural study of the internal organization of Building A as compared to its surrounding houses, it does seem possible that what we are seeing here is a basic scaling up process. Whitelaw observes more generally that when an increase in house size involves a scaling up in individual room size, combined with a proliferation of small rooms used in task-specific ways, one might expect such an increase to represent an increase in wealth. When a house expands to accommodate a growing family group ('a multi-family residence'), Whitelaw argues that one will tend to find coherent sets of rooms replicated within the larger architectural unit (Whitelaw 2001, 19). The former rather than the latter seems to be the case for Building A; but whether this really means that it is a wealthy household that has scaled up, or in fact a building for an organisational form at a higher level than the household (extended family or clan?), is perhaps open to question pending more detailed analysis (see Treuil 1991 for a preliminary architectural assessment). Other building complexes in the town of Malia may have been on a similar footing, such as Quartiers Gamma, Epsilon, Zeta and Theta, and perhaps Villa Alpha, the Crypte Hypostyle and Agora, and the Magasins Dessenne (Schoep 2002). It is argued by Schoep that each of these may have been involved in factional competition for power in the community and the broader region.

The relationship between Quartier Mu and the palace also needs to be considered. If we compare their ground areas, it is notable that once again we are dealing in factors of 10: the palace is around 9000m² compared to the 900m² of Building A. If the palace represents yet another level of scaling up (*contra* Schoep 2002), then presumably we should not be surprised to see a certain amount of duplication of structure. One might imagine that the finds in the palace are a degree more elaborate than in Quartier Mu, but this is not quite the case; indeed Quartier Mu is suspected of having some palace-like functions, given its administrative documents in Cretan Hieroglyphic, and evidence for attached artisans and fine artifacts. Yet with this marked increase of scale, across one order of magnitude in terms of ground area, one should perhaps expect new functionalities to emerge.

Another example we may briefly consider is that of Palaikastro, a large Neopalatial town in east Crete. If we look at the size of the houses, they are very large, with an average size of 215m² compared to 80m² at Gournia (Whitelaw 2001). Whitelaw interprets the greater size of the Palaikastro examples as reflective of greater family wealth. It also seems possible, however, that the greater scale could represent a higher level social unit, such as an extended family, with these large households for extended family groups scaling up into 'clan' house blocks (Cunningham 2001, 2007; Driessen and MacGillivray 1989, 108). This is at present somewhat speculative without a full architectural analysis of house forms. One might note,

however, the large deposits of drinking cups that seem to occur in many of these houses during the Neopalatial period (Knappett and Cunningham 2003). Might these have been used in ceremonies for cementing intra-family relations within the extended family and clan groupings?

Scaling up and segmentary states

If we are going to work our way up the scale from household to palace, then we are obliged to go one step further still, up to the state. We should remind ourselves of Lehner's argument that the ancient Egyptian state itself was essentially a mega-household. Both Schloen (2001) and Lehner (2000) put forward the 'segmentary state' as a model that is largely compatible with the Patrimonial Household Model. The segmentary state has also been suggested as a possible model for some of the early states of Bronze Age Crete (Knappett 1999a; 1999b). The notion of the segmentary state was first put forward by Southall in his work on the political systems of the Alur of east Africa (Southall 1956; 1988), which did not seem to fit within the canonical categories of either chiefdom or state, but somewhere in between. One of the key features of the segmentary state as he defined it was the enduring importance of kinship (which creates a link with patrimonialism, although Southall appears not to have used Weberian social theory). Each provincial segment within the state is structured internally according to kinship ties, be they real or fictive. The structuring principle of kinship is repeated at each level within the hierarchy, creating what Southall called a *pyramidal* structure. This is contrasted with a *hierarchical* structure, typical of *unitary* states, in which powers are clearly differentiated according to the level at which they are situated – at the main centre there will be certain duties and roles that will occur at the top of the hierarchy only and not repeated at lower levels. In a pyramidal power structure, each provincial holder of power to some extent has similar powers to that of the sovereign at the primary centre. A provincial sub-centre becomes a replica of the main centre writ small. As it is expressed by Stein, "peripheral nodes simply replicate at a smaller scale the powers of the centralised authorities, rather than having internally differentiated decision-making powers" (Stein 1994, 11). The distinction made by Southall between segmentary and unitary states is developed further by de Montmollin (1989) and G. Stein (1994), who place these as two ideal types at either end of a continuum of variation. Other archaeological work on segmentary states, in a variety of contexts, from South India to Mesoamerica, is represented by Stein (1977), R. Fox (1977), J. Fox (1987), de Montmollin (1989), Ball (1993), and J. Fox *et al.* (1996).

The segmentary state is, however, far from being universally accepted as a valid model for state organization. Some scholars have criticized it for being self-contradictory, combining elements assumed to be structurally incompatible, principally kinship and the state (Marcus and Feinman 1998, 7–8; see also Schoep 2002, 121–2). This critique seems to be based largely on deep-seated assumptions drawn from modern states rather than on any in-depth analysis. The segmentary state concept in and of itself provides us with a fresh means of assessing early states; when combined with Schloen's Patrimonial Household Model it

becomes stronger still. A new line of enquiry opens up whereby it becomes possible to explore the emergence of state structures from the bottom up. It seems logical to expect some kind of scaling up process as societies grow, such that existing organizational structures are extended and modified (rather than wholly new structures created through a sudden phase transition). Whether or not there is a fractal, scaling-up process at work, from household to state, we are at the very least provided with an exploratory model through which we may seek more effectively to explain the emergence of state structures.

Second versus first millennium BC?

In the context of this volume, designed to develop comparative perspectives that might bridge the gap between the prehistoric and historic Aegean, it is appropriate to say a few words on later contexts, for example the Mycenaean period, the 'Dark Ages' and the states of the first millennium BC. The framework developed here should be entirely applicable to these later political formations, prehistoric, protohistoric and historic. We might very profitably interrogate the relationship between household and state in such instances, and assess the extent to which a process of scaling up can be identified. For the Mycenaean period, one contribution that tackles this issue, albeit briefly, is de Fidio (1992). She refers to the work of Gelb on the socio-economic organization of ancient Near Eastern societies, and his identification of large 'public' households as key socio-economic units in the second millennium BC (Gelb 1979; see also discussion in Schloen 2001, 262–4). It seems Gelb suggested this form of organization might also hold true for Mycenaean Greece, a suggestion to which de Fidio is sympathetic. Gelb also proposed this model for Homeric Greece, a proposition to consider in the light of Lemos, Livieratou and 'Thomatos' contribution to this volume. However, when it comes to the first millennium BC, I am reminded of comments made by Schloen, more for the Near East than the Aegean *per se*, concerning the fundamental differences between the states of the second and first millennia BC. He suggests that it is in the first millennium BC that bureaucratic, rationalized states emerge for the first time, quite different to their patrimonial counterparts in the second millennium BC. If this general observation can be extended to the Aegean, which Schloen suggests it can, then we might expect to see a lack of continuity between household and state as organizational forms. Morris (2000) identifies what he calls a 'middling' culture that was fundamental to the *poleis* of Iron Age Greece: citizenship was based on class and gender, and had little to do with the household. He suggests that many citizens probably experienced tensions between their civic identity on the one hand and their household on the other (2000, 124). The relationship between the Greek 'oikos' and the *polis*, often depicted in opposition to one another, is also questioned in other recent contributions (Nevett 1999; Morgan 2003). Should this opposition prove to be an enduring one in Iron Age Greece and later, this might well go some way towards explaining the comments in Aristotle's *Politics* cited at the start of this paper. It would be interesting to situate these debates within the framework provided by Schloen – does the *polis* represent one of the first examples of a rationalized state in which kinship is not a structuring principle?

Conclusions

My aim in this paper has been to provide some thoughts on how one gets from the household to the state. I believe this is a useful exercise toward understanding the emergence of urban systems. Whether or not the ‘scaling up’ of the household as a basic organizational form stands up to detailed scrutiny as far as societies of Bronze Age Crete are concerned, as a model it does at least constitute a heuristic device for throwing new light on some key questions that have been overlooked.

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3 Social and Political Aspects of Urbanism in Middle Minoan I–II Crete: Towards a Regional Approach

Ilse Schoep

“The distribution of people and institutions within cities reflects the overall structure of the society as a whole”

(Clark 1982, 14)

One of the things that has become more and more apparent in the last decade is the regional character of developments in the different parts of the island of Crete during the Bronze Age. This understanding has in the first place been occasioned by the regional differences in settlement patterns revealed by archaeological survey (for a general overview see Driessen 2001) and ongoing excavations in different parts of Crete. However, despite this developing picture of divergence, the Protopalatial period in different parts of the island is still conceived, in many respects, in terms of homogeneity. It is still widely accepted that the emergence of the so-called First Palaces in this period represents a synchronically homogeneous horizon that occurred over the entire island in Middle Minoan (‘MM’) IB, around 2000 BC:

“The twentieth century BC saw the appearance, in several regions of Crete, of complex monumental building (i.e. palaces) of closely similar form, the material embodiment of radically new institutional features and major changes in the organisational basis of Minoan society”

(Cherry 1986, 27)

The perception that Protopalatial Crete (MM IB–II; c. 1900–1750 BC) was culturally homogeneous has resulted in a focus on the palace as a barometer of social and political complexity. The First Palaces are regarded as a pan-Cretan feature and developments in different parts of the island are thought to have held equal pace, with society organised in a similar way. This is clear from the assumption that areas that have hitherto failed to yield a palatial building will in the future reveal such a building. Thus, for example, the existence of a palace has been postulated for Kato Zakro in east Crete, and for Chania and/or Stavromenos in west Crete (Cherry 1986; Cadogan 1994; 1996). This repetition of a similar pattern over the whole island is also implied in Renfrew’s Early State Module (1986), the predictive power of this model being considered to be one of its main advantages. However, the occurrence of a building of identical or similar plan (*i.e.* a palace)

does not automatically imply a similar or identical degree of socio-political complexity and organisation of the settlement and the region around it.

Moreover, there is no such thing as the MM IB emergence of the First Palaces (Schoep and Knappett 2004). Rather than a single emergence we are dealing with a process which may have started as early as Early Minoan ('EM') IIB and which is characterised by patterns of development that differ between the known 'palaces'. The First Palace at Malia was constructed in EM III–MM IA and destroyed at the end of MM IIB (Pelon 1983). However, more importantly, a predecessor of the palace plan was found to date to EM IIB (Pelon 1999). At Knossos, there can be no doubt that a monumental structure of unknown plan, which was destroyed by a fire destruction at the end of MM IA and of which the EM III North-west Platform formed part, preceded the MM IB building (Wilson 1994, 38). The case of Phaistos is different yet again since so far no evidence has been found for the existence of any monumental building prior to MM IB. At Petras, a scaled-down version of what is characterised as a palace or a building with a west and central court – hereafter designated 'court building' – was constructed in MM IIA (Tsipopoulou 1999; 2002). This is relatively late in comparison to developments at Malia, Knossos and Phaistos. It would thus appear that the court buildings were constructed and reconstructed in different parts of Crete largely in response to local trajectories and needs.

By taking two case-studies from the MM I–II period, Malia on the north coast and Phaistos in the Mesara plain in south-central Crete, this paper will assess regional trajectories in more detail. Both Malia and Phaistos were urban settlements that contained a court building and are therefore usually assumed to have displayed a similar socio-political organisation and complexity (*i.e.* a small-scale state, see Cherry 1986; Watrous *et al.* 1993; Watrous *et al.* 2004). However, an assessment of the urbanism of both settlements reveals a number of differences which pertain not only to the court buildings themselves (biography, location and external appearance) but also to the scale and spatial organisation of their surrounding urban environments and hinterlands. Through an assessment of the relationship between urbanism and social structure in both settlements, this paper will explore whether these differences correspond to underlying differences in social organisation.

Architecture in general and the replication (or rejection) of a particular architectural form should in the first place be considered as (part of) a social strategy and as such it cannot be separated from the actions of people. Moreover, architecture not only reflects social structures, but also actively participates in maintaining them with certain architectural forms serving as concomitants and signifiers of power for controlling elites (Emerson 1997). It is this dual relationship between social structure and architecture and therefore between social structure and urbanism that will here be explored. The emulation or replication of architectural forms, here the court building, must be seen in this context, rather than simply assuming that a particular architectural form implies an identical type of institution or socio-political organisation.

The early Court Buildings of Malia and Phaistos compared: biography, topography, form and external appearance

As noted above, the early court buildings of Malia and Phaistos appear to have had rather different biographies. At Malia traces of a large building with court, dating to EM IIB, have been found underneath the EM III–MM IA court building (Pelon 1983; 1999; Poursat 1988). At Phaistos, however, there is no evidence for a court building before MM IB, although a test below the lower west court did reveal an older pavement with EM pottery (Pernier 1909, 55). Branigan's (1970, 41) contention that an EM predecessor of the MM IB court building was found beneath the 'peristylum' has been refuted (Levi 1976, 294) and EM remains beneath the court building are more consistent with houses than a monumental complex. The earliest part of the court building, the south part, was constructed in MM IB, the north part in MM IIA. This building was destroyed by an earthquake at the end of MM IIA and repaired and modified in MM IIB (Fiandra 1961–62). At the end of MM IIB the court buildings at Phaistos and Malia both suffered destruction.

The topographical implantation of the court buildings at Malia and Phaistos also seems to have been different, which underlines their different biographies. The EM III–MM IA court building at Malia was located on a low hill ('Zgourokefalo') and seems to have occupied a peripheral position within the settlement, which in MM I–II extended further to the east beyond Quartier Zita (Müller 1992, 745). At Phaistos, great effort seems to have been expended in order to build the court building into a steep slope: the south wing was constructed halfway down the slope of a ridge, the north part of the court building was constructed at a higher level of this slope and the west court comprised three different levels, each of which communicated with a part of the court building. Externally, the north and south parts of the court building communicated by means of a staircase between the lower and the middle west court (Fiandra 1961–62, 114). Internally, the rooms of the first floor in the south part may have stood at the same level as the ground floor rooms of the north part. The north part of the court building was also constructed on a slope and only the upper west court of the building seems to have been situated at the top of the ridge. This location on the southern slope of the ridge is surprising, especially in view of the supposed visual link between the court building and Mount Ida and the Kamares Cave to the north (Cherry 1986, 28–9). In MM IB the court building would instead have been oriented towards (and have been visible from) the Mesara plain to the east and south rather than the Kamares Cave, assumed by some to have formed the northern boundary of the Phaistian state (Watrous *et al.* 2004, 285).

Although the architecture of the first court buildings is generally assumed to have been remarkably similar (Cherry 1986, 27), beyond obvious similarities such as multiple courts and monumental scale, the court buildings at Malia and Phaistos actually exhibit important differences. The extant architectural remains of both court buildings suggest that different architectural principles governed their planning. At Malia, an important architectural innovation, the use of long corridors, from which several rooms are accessible, may be seen in the north-west part of the court building (Pelon 1980) and in the East Magazines.

The use of a corridor is considered to be an important architectural development in the Near East in the Early Bronze Age (Margueron 1987). This innovation is not attested at Phaistos, where a system of interconnecting rooms is used. From the point of view of communication, this system is far less effective because in order to reach the innermost rooms, all preceding rooms need to be crossed. A second innovation found in the Malia court building is the use of an internal courtyard bordered by columns (Pelon 1980). The use of low platforms in stucco in association with a drain in the East Magazines at Malia also appears to be something new. In addition, while the Malia court building consists of at least three wings (west, north, east) around a central court, this is not yet certain for the Phaistos building where no stratified MM I–II level has been found beneath the north and east wings of the later court building (see Schoep 2004): the Protopalatial phase identified by Halbherr can now be identified as MM III (see La Rosa 2002). It is thus possible that the central court at Phaistos was actually an east court during MM I–II (Schoep 2004).

There are also significant differences in the external appearance of these two court buildings. At Phaistos the west façade makes use of orthostats. This was a new architectural technique, where large cut blocks with a smooth, rectangular exterior face and an irregular back face are set upright on one of their longer sides upon a low, projecting krepidoma or plinth (Shaw 1971, 83). At Malia, the extant west façade post-dates the MM I–II period and there is no evidence that ashlar masonry was at this date applied in the palace (Schoep 2004). Preserved stretches of façade seem rather to point towards walls of unworked limestone blocks.

Spatial organisation of settlements

The above differences in the court buildings at Malia and Phaistos do not in themselves imply differences of a socio-political nature between the settlements. However, it is surely significant that these differences find a corollary in differences in the spatial organisation of the urban centres within which these court buildings are situated. For the purpose of comparison, the following assessment assumes that the excavated parts of each settlement are to a significant extent representative of the whole.

One obvious difference concerns the high visibility in the settlement of Malia of structures that distinguish themselves from domestic structures by their size, their architecture and the activities to which they bear witness (Schoep 2002). Rather than being concentrated in the immediate area of the court building, as one might assume (e.g. Whitelaw 2001), these high-profile buildings are distributed in different parts of the settlement and linked together by an elaborate network of roads. The Crypte Hypostyle comprises a series of subterranean rooms constructed in ashlar and, at a higher level, storerooms intended for the storage of liquids. The so-called ‘Magasins Dessenne’, of which an area of 270m² has been cleared (the building originally comprised at least double this area), constitutes another high-profile building. The complex of cut limestone blocks with plastered walls and column bases, discovered by the Malia survey to the south-west of Quartier Mu, also seems to have been more than an ordinary town-house. Besides high-quality architecture, it yielded evidence for workshop activities and administration (Müller and Olivier 1991). Finally, there is the well-known

complex of Quartier Mu, which consists of two main buildings, A and B, and a number of workshop-houses. Of the two main buildings, Building A is the more striking because of its external and internal architectural features: specifically a west façade in ashlar masonry associated with a small paved area and raised walks and, inside the building, the oldest (and so far only) attestation in MM II of a lustral basin and Minoan Hall (Poursat 1992).

These high-profile structures were clearly not ordinary houses. The activities to which they bear witness, namely storage of agricultural surpluses, specialised craft production and the use of writing and administration, suggest that they were connected with elite groups involved in activities that have traditionally been associated with the ‘palace’ (Schoep 2002). It would seem that these elite residences contained specific rooms for ceremonial activity, best illustrated by Building A of Quartier Mu with its small west court with raised walkway and Minoan Hall and lustral basin. The use of innovative and conspicuous architectural features (so-called ‘palatial architecture’) in a number of high-profile structures in the settlement of Malia is of great importance, the more so because there is no evidence that the most conspicuous of these (*i.e.* ashlar masonry for the west façade and the architectural module of lustral basin and Minoan Hall) were deployed in the EM III–MM II court building itself (Schoep 2004). This seems to suggest that elites in the settlement were not simply imitating what was going on in the court building but were themselves creating a new architectural style. The repetition of administration, craft specialisation, ceremonial/religious activity, and monumental architecture in different areas of the town suggests that the functions usually associated with ‘palatial’ authority were not centralised in the court building, or for that matter in Quartier Mu. Thus, rather than supporting the interpretation of the First Palace as a single hierarchical authority, the evidence from the settlement at Malia suggests the existence of a number of elite groups, who played an active social, political, economic and ideological role in the life of the settlement.

The urban centre of Phaistos, in its present excavated state, seems to present a different picture. Parts of the town have been excavated on the ridge to the west of the court building as well as to the south-east (Chalara) and north-east (Ayia Photini). The houses to the west of the west court of the court building are small and were organised in blocks. The Casa a sud della Rampa (= Casa a SW del Piazzale) seems to have been freestanding, but its main occupation phase is MM IIIA (Levi’s phase III). In contrast to Malia, there is no evidence for the use of so-called ‘palatial’ architectural features in any of the houses although the quality of some is decidedly superior to others. More telling, however, is the absence of the sorts of activities that are attested in the high-profile buildings at Malia (*i.e.* large-scale storage, craft production, administration, ceremonial venues). With the exception of the Casa a sud della Rampa, which dates to MM III, none of the houses has yielded sizeable storage facilities. This contrasts with the situation at MM II Malia where several high-profile buildings had evidence for large-scale storage (Quartier Mu, Crypte Hypostyle, Magasins Dessenne).

One of the more carefully constructed buildings at Phaistos is XLVI–XLIX to the south-west of the court building, from which it was separated by a narrow street (Levi 1976, 421). The north façade displays recesses and the walls are constructed in regular blocks (but not ashlar masonry). Of the original house, only four rooms have been preserved. Room XLVIII

has a paved floor, a bench along the north and west wall and possibly a window in its north wall (Levi 1976, 425). A second notable building is CV–CVI–CVII to the north-west of the court-building (Levi 1976, 602–29). This was dated to Levi's Phase Ib (MM IIA), but a MM IB level was found in soundings beneath the floor. It consists of three communicating rooms of which only the internal walls are visible. The extent of the building is not clear since its south side was destroyed by Mycenaean walls and by the construction of the modern pathway leading to the site. The internal rooms were constructed in regular blocks and covered by stucco. Room CV includes an unusual feature that has been interpreted as a chimney (Levi 1976, 608, fig. 977). The finds from this building comprise in the first place fine decorated Kamares Ware, mainly drinking and pouring shapes, an appliqué of a bovid and a female figurine and a horse-shoe shaped architectural model (Levi 1976, pl. 45f). Benches occur along the walls of the main room (CVII). The plan of this building and its size set it apart from the excavated houses in the settlement and it seems likely that this structure was more than an ordinary house. The doubling of the north wall of CVII is reminiscent of the 'Sanctuaire aux Cornes' at Malia (Dessenne 1957, 695–700). The high-quality drinking and pouring shapes could suggest that this building was a venue for meetings during which liquids were consumed. Building CV–CVI–CVII may have fulfilled a function other than a domestic residence, but it is not clear whether the building was independent or whether it formed part of a larger structure.

Some evidence for craft production has been found in the settlement of Phaistos but not directly in association with elite structures. In MM IIB a potter's kiln was constructed in the street to the west of the West Court (Tomasello 1996), suggesting that the street went out of use at this time. What happened in order for a street so near to the west court to take on a completely different character is not clear. However, it seems that the south part of the early court building and Building XCIV–XCV, which has been interpreted as serving a commercial purpose because of the large quantities of vases that were stored here (Levi 1976, 524–33, figs 819–21; Carinci 1997, 319), also went out of use at this time. Unlike at Malia, there is no evidence for administration from the settlement at Phaistos – only the court building has yielded administrative documents (Militello 2000; 2002). A single tablet was found at Ayia Photini, but this seems to date to the Neopalatial period (Militello 2002). Three (uninscribed) sealstones come from the houses to the west of the court building (Militello 2000).

To conclude, if the excavated portion of the settlement is representative, Phaistos would appear to lack the sort of high-profile buildings that through their high-status activities and expenditure of energy and resources testify to an elite status for their occupants. If high-status activities, such as attached craft production (*i.e.* monitored by elites), administration and large-scale storage of agricultural surpluses, did occur in the settlement of Phaistos, they were considerably less conspicuous than at Malia. At Phaistos, the major levelling and terracing operations required to insert the court building into the slope and the use of sandstone orthostats testify to a high material and symbolic expenditure of energy and resources. Experimental archaeology suggests that 1m³ mixed earth and stone fill would require 5.25 person-days of labour and since the early court buildings of Malia and

Knossos were built on hills, considerable levelling would have been needed (Arnold and Ford 1980). Thus it would appear that at Phaistos, large amounts of energy were invested in the court building and, as far as we can tell, far less energy was directed towards the houses. At Malia, this situation seems to have been reversed. During MM IB–MM II elite structures in the surrounding settlement seem to have been the main foci for conspicuous expenditures of energy, while the court building, although large in scale, did not receive the same architectural embellishments (Schoep 2004).

The Court Building at Phaistos in context: elite emulation and Peer Polity Interaction

There is good evidence to suggest that elites in different parts of Crete were emulating one another (Cherry 1986; Knappett 1999). Emulation takes place at different levels, at an extra-island or external level and at an intra-island or internal level. Emulation at an external level implies that elite groups were in a position to draw directly upon links with the Near East and/or Egypt. This has, for example, been suggested for the elite group resident in Quartier Mu at Malia (Immerwahr 1978; Schoep 2006). Distance may be exploited as a resource to demonstrate privileged knowledge, membership and control of external links (Schoep 2006). Other elite groups may not have had such extended contacts and instead drew upon elites that were closer to home; they presumably looked towards the more privileged and powerful elite groups in the island. This would seem to be the case for elites at Myrtos-Pyrgos, Petras and Monastiraki, who seem to have been emulating elites at the larger urban centres of Malia and Phaistos.

At Petras, a small-scale building with ‘palatial’ characteristics, principally a central court and a series of narrow north-south rooms, was constructed in MM IIA (Tsipopoulou 1999; 2002). There is no evidence for the existence of a central building prior to this moment, despite the evidence for the existence of elites in the shape of the high-quality pottery from the ‘lakkos’, which represents clearance from destroyed elite houses (Tsipopoulou 2002, 137). However, although some of the pottery displays similarities with pottery from Malia (Knappett 1999), there are also distinct local styles, such as Spatter Ware and Rough-burnished Ware (see Haggis 2007). A similar process is at work at Monastiraki, where the similarities in material culture with Phaistos have repeatedly been pointed out (Kanta 1999). The building on top of the Charakas hill has not been completely excavated but it seems to have had a large open court to the east. Like the Phaistos court building it was constructed on terraces, with the magazines that were already cleared by the Germans (Matz 1951) situated on the lower terrace. The west part of the building contains a room with a column and a stone doorjamb (Kanta and Tzigounaki 2000, 193, 208). Both the pottery and the sealing system show close similarities to Phaistos. Besides Phaistos, the only other site displaying extensive use of direct object sealings is Monastiraki, but whereas at Monastiraki the majority of the direct object sealings were sealing pithoi, at Phaistos the majority were sealing doors and/or chests (Kanta and Tzigounaki 2000; Militello 2000).

The different spatial and social patterns in the urban centres of Phaistos and Malia may also be understood in terms of elite emulation and peer polity interaction. Analysis of the

Phaistos evidence points towards emulation at both an external and an internal level (Schoep forthcoming). If the earliest court building at Phaistos indeed dates to MM IB, it would represent a fairly late development in comparison to Knossos and Malia, where evidence for a monumental building preceding the MM IB and EM III/MM IA 'First Palaces' goes back to EM III (North-West Platform and EM III terrace wall) and EM IIB (Pelon 1999). Thus, the idea for the construction of a court building at Phaistos may have been adopted from north-central Crete. However, other elements such as the orthostat façade and the use of frescoes (Blakolmer 1997; Militello 1999), suggest a conceptual link with elites in the Eastern part of the Mediterranean. It is not clear, however, whether Phaistos entertained direct contacts with the East or whether these influences were transmitted through north-east Crete (Carinci 2000).

The adoption of the concept of the court building need not have been accompanied by the wholesale importation of the same spatial configuration of power as found in the older court building centres. Rather, it may be expected that the imported concept will have been adapted to suit local scales, dynamics and purposes. Although in the cases of Petras and Monastiraki, it has never been suggested that they were organised along the same lines as the much larger centres of Knossos and Malia, this has been the fate of Phaistos.

The main reasons for this are no doubt the monumental character of the court building and the presumed large size of the settlement. Watrous argues on the basis of sherd scatter that "by the Middle Minoan IB period, Phaistos had developed into a state centre measuring at least 1500 × 1000 metres" (or 150ha) (see Watrous *et al.* 1993, 225). However, such a high figure seems improbable since it would make Protopalatial Phaistos twice the size of Knossos and three times the size of Malia (Branigan 2001, 47). Moreover it assumes that the large scatter of sherds to the west and south of the ridge, upon which the court building sits, represents a single continuous nucleated settlement (Branigan 2001, 47; Whitelaw 2001, 32, note 4). Watrous has subsequently revised his figure down to *c.* 90ha (0.9 × 1.0km) (Watrous 1994, 736) and most recently to "at least 50 ha" (Watrous *et al.* 2004, 277). Whitelaw has suggested that activity, which was not necessarily continuous, can be documented over some 60ha (Whitelaw 2001, 32, note 4). Branigan (2001, 47) estimates the size of Phaistos at 40ha on the basis of the assumption that the palace, which he assumes to cover 8000m², took up about 2% of the total area of the town. However, this seems to be based upon the size of the Neopalatial palace and the lack of stratified MM I–II remains beneath the later north and east wings does not allow us to assume that the Protopalatial building took up the same amount of space. The variation in these figures for site size (40–150ha) only serves to emphasise the caution with which one should treat estimates of site size that are based on sherd scatters rather than sherd densities or excavated deposits. Excavated parts of the settlement of Phaistos show that it certainly extended to the west of the court building (probably all the way up to the church of Ayios Georgios in Phalandri) and on the lower slopes to the north-east (Ayia Photini) and east (Chalara) of the ridge on which the court building was built. These excavated deposits would suggest a minimum extent of no more than 13–18ha.

Considering, therefore, the relatively late adoption of a court building at Phaistos and

the noted differences in the pattern of urban organisation noted above between Malia and Phaistos, it may tentatively be suggested that there was a difference in scale between the two settlements and that Malia was the larger settlement.

Variations in the spatial configuration of elites and social power

It has been suggested above that organisational differences between the urban centres of Malia and Phaistos may in part derive from differences in scale. However, another related reason may be differences in the spatial configuration of elites and social power in the Phaistos region, when compared to Malia. The preliminary reports of the Malia survey indicate that the number of sites in the Malia plain increased dramatically from about 8 EM sites to about 80 in MM. These MM I–II sites seem to have been small and appear to have been arranged in three almost concentric bands around the urban settlement, perhaps in order to achieve maximum exploitation of the plain. There is thus no evidence so far for any larger settlements in the vicinity of the urban centre of Malia. It would appear, therefore, that elite groups in the Malia plain located themselves in the urban centre.

In contrast, the western Mesara in MM I–II appears to have contained several sizeable settlements and pockets of wealth near Phaistos. During MM I–II Ayia Triada grew from several dispersed Early Minoan occupation nuclei into a settlement comparable in size to the Neopalatial settlement (Carinci 1999, 124). In MM II a paved road and a paved area with remains of an altar were constructed in the area to the south of Tholoi A and B. It has also been argued, on the basis of the red plaster floors with white decoration in the area of the Avancorpo orientale, that a major MM II building probably existed in the area of the later villa (Carinci 1999, 126). The discovery of a mould for appliqué and a potter's wheel indicates the existence of a pottery workshop at the site (Carinci 1999, 127). The Kamares pottery at the site is of the same quality as that from Phaistos and may in fact derive from the same workshops (Van de Moortel 2002). The contents of the tombs at Ayia Triada, which feature several Eastern imports (Warren 1995; Carinci 2000, 32), clearly indicate wealth and access to wider exchange networks.

Kommos also seems to have expanded in MM IB or MM IIA (Wright 1996, 189) to become a sizeable settlement. A large MM IB–II building with thick, well-built walls was discovered below the later East Building in the area of the Central Hillside (Wright 1996, 165). In the south area of the settlement, a monumental building (AA) was constructed in MM IIB. This comprised a large central court, bordered by a colonnade to the south and probably also the north and associated with a paved walkway to its west (Shaw 2002, 100). Shaw has suggested that the construction of Building AA could not have resulted from a communal effort and that therefore it must have been built with the help of the court building at Phaistos (Shaw 2002). However, this explanation necessarily assumes that Phaistos was a strong centralised power in the region and that it could dictate activity in surrounding settlements. By contrast, the nature of the changes taking place at Phaistos in the last phase of MM IIB (abandonment of part of the court building and the road immediately to the west of the west court) could suggest that Phaistos was in no position to finance the construction

of building AA at Kommos (Carinci 2006, 24). On balance, it seems much more likely that elite groups at Kommos were responsible for this construction.

The pattern of funerary activity in the western Mesara also suggests the existence of pockets of wealth outside Phaistos. The funerary deposits from Ayios Onoufrios have long been known for their rich finds (Evans 1895, 105–36) and as a result of their proximity to Phaistos have been associated with groups resident there (Carinci 2000, 32). However, a much closer group of MM tombs has been discovered on the Ieroditis ridge to the west of the court building (Watrous *et al.* 1993, 224). It thus seems possible that the Ayios Onoufrios tombs should be associated with another settlement in the vicinity of Phaistos (for which see Carinci 2000, 32). In addition, the tombs at Platanos, Koumasa, Kalathiana and Ayia Triada, all within the general vicinity of Phaistos, have produced numerous items in metal (Branigan 1993, 112). It would thus appear that just beyond Phaistos there were a number of settlements with groups that were conspicuously disposing of their wealth.

The origins of these two different settlement patterns can perhaps be traced back into the EM period. The Malia survey recovered only a handful of EM sites (Müller 1996, 1236; 1998, 548, 552), of which one was large (Müller in Blackman 1997, 109). The large site near the Arkovouno was abandoned after EM IIB, perhaps in favour of Malia, where a predecessor of a court building was constructed in EM IIB onwards (Pelon 1999). There appears to have been nucleation at Malia from EM IIB onwards. In contrast, the Mesara plain around Phaistos seems to have been densely inhabited from EM II and the apparent continuity in habitation suggests that these settlements were not abandoned in favour of Phaistos (Watrous *et al.* 1993; Branigan 1995; Watrous *et al.* 2004).

These patterns of settlement suggest two different scenarios. In the Malia plain between EM IIB and MM II elite groups appear to have elected to reside in the urban centre, thus contributing to the significant size of Malia in this period, while land outside the urban centre may have been worked from small farms. In the western Mesara, however, a similar process of nucleation and abandonment is not in evidence. Larger EM settlements, such as Ayia Triada, Kamilarí and Kommos, continued to be occupied and prospered and there is evidence from the funerary record for pockets of wealth in these places. This suggests that some elite groups chose not to re-locate to a single urban centre (*i.e.* Phaistos). Such a scenario would offer a means of explaining why there appear to be few, if any, high-profile buildings at Phaistos outside the court building. In addition, the disproportionately large amount of energy invested in the construction of the court building at Phaistos in relation to the town could be understood as reflecting not just the input of groups resident in the town but also the contribution of elite groups resident in neighbouring settlements. Although the presence of sealings in the court building at Phaistos has traditionally been understood in terms of a centralised palatial authority, the existence of multiple elite groups resident outside the court building in the surrounding settlement and the wider region would explain the large number of seal-impressions on the sealings (too large to represent resident functionaries). In addition, a large number of seal-types were only impressed once (Weingarten 1986). Together with these sealings were found hundreds of juglets with decoration of flames (Walberg 1990; Militello 1999) and the question arises whether these could point towards communal feasting

at a large scale. Different seal-types could point towards individuals partaking in these events (for a similar suggestion at EH II Lerna see Peperaki 2004).

However, even if Phaistos enjoyed a pre-eminent position prior to and at the time of the construction of the court building in MM IB and MM IIA, one cannot be certain that this lasted until the end of MM II. There are signs that in MM IIB elite groups in nearby settlements were profiling themselves in ever more conspicuous ways: at Kommos, as noted above, the monumental building (AA) with ample open spaces was constructed in MM IIB (Shaw 2002); at Ayia Triada, considerable expenditure of energy and labour seems to have been directed towards the monumentalization of the area of Tholoi A and B (construction of a paved area with altar and a road) and towards the construction of a prestigious building in the area of the *Avancorpo orientale* (see above, p. 35). Although it is generally assumed that this area of the Mesara was closely integrated into a 'Phaistos state' in MM IB–II (Watrous *et al.* 1993; Watrous *et al.* 2004), the spatial configuration of power suggests a much more small-scale collection of competing groups, with, perhaps, a special regional-ceremonial role for Phaistos.

Conclusions

It has been argued here that the recurrence of similar elements of material culture in different settlements, whether architecture or portable goods, does not automatically imply an identical socio-political organisation or complexity. This paper argues in particular that each urban centre, whether it possessed a court building or not, should be assessed within its own specific regional context. The presence of a court building at Phaistos is traditionally taken to imply that this settlement was the centre of a small 'state' (*inter alia* Cherry 1986; Watrous *et al.* 1993; Watrous *et al.* 2004) and that it was organised along the same lines as the urban centres of Knossos and Malia. However, the above assessment of the spatial organisation of the urban centres of Malia and Phaistos highlights a number of important differences. These pertain not only to the biography of the court buildings but also to the scale, complexity, spatial organisation and function of the settlements. In addition, differences in the spatial configuration of elites, both in the settlements and in their surrounding hinterlands, provide important insights into the scale, complexity and function of these two urban centres. Whereas at Malia, the main elite groups seem to have been concentrated within a single, large urban centre, this does not appear to be the case at Phaistos. In addition to being a ceremonial centre, Malia was clearly also a thriving political and economic centre, comprising a number of conspicuous elite groups. At Phaistos, a comparative lack of high-status economic and other activities suggests a different scenario, supported by evidence for conspicuous deployments of wealth in the settlements that lie in the vicinity of Phaistos. It would appear that elite groups in the west Mesara chose not to re-locate to Phaistos in the same way as may have occurred at Malia and these two divergent patterns would seem to have their origins in the EM period. There are hints that the situation in the west Mesara may have reached a crisis before the end of MM II. It is surely significant that both Kommos and Ayia Triada in MM IIB seem to develop their own ceremonial venues (Building AA at Kommos; architectural

elaboration of the cemetery at Ayia Triada). This could suggest that the integrated landscape of MM IB and MM IIA, when Phaistos may have been promoted and accepted to be the main centre of the region, becomes more fragmented in MM IIB, evidenced by increased competition between these settlements.

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4 Daidalos' Designs and Ariadne's Threads: Minoan Towns as Places of Interaction

Jan Driessen

Several approaches to the study of ancient cities are possible and, in the past, evolutionary approaches with diachronic perspectives and studies of regional integration – the city as a complement to rural life – have been particularly successful (see Branigan 2001 and Herzog 1997, 2–7, who mentions the *ideal-type dichotomic, evolutionary, regional integration* and *power-relation* approaches). Herzog (*ibid.*, 6) has advocated the power-relation approach as seeing “the city as a type of settlement that reflects power relations in society” and “a place where the institutions are a tool used by groups to acquire higher status”, or, in Giddens’ words (1984, 262), a “container of power”. The city is indeed the “stage for and the communicational means of the elite to exercise its powerful status in society” (Herzog 1997, 7) and, in this paper, this is especially the angle that is explored for Minoan Crete in the Protopalatial (Middle Minoan IB–II) and Neopalatial (Middle Minoan III–Late Minoan I) periods (for absolute dates, see Driessen and Macdonald 1997, 22–3). This implies looking not only at the discriminate allocation of space, use of materials, investment of labour and types of buildings, but also and foremost, at systems of interaction and communication, at the ways specific zones are organised to become *social arenas* (a term borrowed from Relaki 2004), interfaces between actors and spectators, between residents and visitors.

The date and the importance of the establishment of central and western courts in Minoan Crete, and their relevance to what is usually dubbed the ‘origin of the Minoan palaces’, have been discussed in detail elsewhere (Driessen 2002; 2003; 2004; Vansteenhuyse 2002). Here I want to take this one step further and propose that it was also the incorporation of such zones as gathering places and their architectural elaboration that made ‘towns’ out of Minoan villages, that distinguished settlements such as Knossos, Malia, Palaikastro and some others from the majority of Minoan sites. These *interface* zones, represented by hierarchically situated courts, and often equipped with specific attention-focussing devices, had to be reached by residents and visitors alike and I will suggest that settlements which incorporated such interface zones organised specific access and circulation routes to reach them. The elaboration of these routes represents what we may perhaps call ‘Ariadne’s clues/threads’ – ways to bring us in and out of the Minoan ‘labyrinth’.

Minoan town planning and communication: a brief historical review

It may be pertinent to begin with a brief historical review of studies on Minoan urban planning, stressing those that gave particular attention to communication and to the ways Minoan towns were organised to convey particular messages. Even before Childe (1950; 1951) drew attention to aspects of the 'Urban Revolution', the discovery of certain iconographic and archaeological evidence (the 'Town Mosaic', frescoes, courts and roads) during the Knossos excavations, and of extensive town plans at Gournia and Palaikastro at the very beginning of the twentieth century, had underlined the originality of Minoan urbanism, especially in contrast with the Mycenaean Mainland where such urbanism was (and still is) largely absent. From then onwards, a discussion of Minoan city plans found its way into both specialised and general works on urbanism in the Greek world. Early surveys of Minoan and/or Greek urbanism, such as those by Reber (1913), Rider (1964), Bell (1926), Tritsch (1928) and Robertson (1940), consistently linked Bronze Age developments to later Greek features, and this remained the case for later works, as shown by the studies of Coppa (1968, esp. 81–4, 375–85 and 442–8) and Doxiadis (1972), to give just two examples. Other scholars have exclusively analysed Minoan urbanism, but have often remained mainly descriptive, with few attempts to identify the organisational principles behind Minoan town lay-outs (e.g. Noack (1908), Press (1958), Graham (1963), Preziosi (1983)). Tritsch (1928, 20–37), however, identified what he called a "Zentralipetismus", a central authority that planned the lay-out of towns, at the same time as a "politischer Trieb" (*ibid.*, 82), an absence of a rigorous class separation, an almost classical *polis*-like structure. Despite the title of his three articles comprising *Prehistoric Town Planning in Crete*, the work by Hutchinson, one-time curator at Knossos, did not really treat essential features of Minoan urbanism (Hutchinson 1950; 1953; 1954). Similarly, it was only at the very end of Branigan's 1972 paper on Minoan settlements that some brief comments were made on what dictated the road system of the three east Cretan towns he investigated: Pseira, Gournia and Palaikastro. For Gournia, he proposed that the public court was the nodal feature (Branigan 1972, 758–9) rather than the palace, although he assumed that the signs of central or communal planning that were identifiable in the three cities – the paved and/or stepped streets and the drainage systems, including the discovery of a stock of terracotta gutters in room 24 of the Gournia palace – suggested the presence of a central authority. Branigan also suggested the presence of a circuit road at Palaikastro and commented upon the presence of *insulae*, the discriminate allocation of building plots and the potential functional organisation of Minoan towns.

In the early eighties there followed the interesting ideas by Damiani Indelicato (1982a; 1982b; 1984; 1985; 1986). She tried to argue that the primary organisational principle in Minoan palace settlements was the West Court, the original hub for the street system, later appropriated by the palaces. Although she may have been right in a few instances, such as Gournia and perhaps Zakros, her work has not carried general agreement partly because it was not really supported by a proper archaeological and architectural analysis. In my view, the merit of her different studies lies in the fact that she tried to identify a *destination* for the street system and this is the angle I will explore further in this paper. She also presented

a more detailed analysis of the town plan at Gournia (Damiani Indelicato 1984), noting how the East and West Ridge Roads primarily organised the top of the hill, leading traffic to the town square. Her so-called 'radioconcentric' plan (*ibid.*, 52) also occurs at Palaikastro and undoubtedly elsewhere.

Interesting observations were made by Palyvou (1986) on the town planning at Thera, distinguishing between main streets "primarily meant to carry all the traffic through and within the settlement" (*ibid.*, 185), narrow alleys and blind alleys or culs-de-sac. She discusses how "streets are routes....the most convenient and easy way of communication between two points" (*ibid.*, 192), and constructs a strong argument to show that the formation of the façades and especially their *dentation* – a very diagnostic feature of Minoan architecture – is primarily related to the "street formation, accepting that some streets pre-existed as routes adjusted to the ground, with no anticipation of the town plan into which they would one day be incorporated" (*ibid.*, 193).

A paper by Chrysoulaki and Platon (1990) presents the next step, in which Minoan urbanism was seen as a cellular development through adjunction. Most importantly, Chrysoulaki stressed the essential role played by the artery that connected the houses with what she called the "economic lung" of the settlement (Chrysoulaki and Platon 1990, 372) and which, in her view, remained the essential feature of the development. This 'economic lung' – whether a harbour, fields or pasture zones – which she saw as an organisational principle, may indeed characterise village lay-outs but it may be doubted that it truly represented the essence of the elaborate Minoan towns. Another paper which focused entirely on Minoan circulation systems is Warren's study (1994) of the roads of Knossos. I will return to some of his analyses below, but we may note that he identified several communicational principles, including roads as direct communications between site and agricultural hinterland and between the different buildings of a settlement (*ibid.*, 209). He stressed that, at Knossos, the early Middle Minoan city road lines seem to have had *priority* over existing buildings, a standard width (1.40m) and construction, as well as a high level of axiality, facts which, in his view, clearly imply a decision by a central authority. He noted that the start/finish points of these roads were "at some element of the central building" (*ibid.*, 209) and argued that they connected "the Minoan capital to the outside world through arterial routes to destinations north, south, west, and, probably, east" (*ibid.*, 190).

We may briefly also mention some of the papers in the *Urbanism in the Aegean Bronze Age* volume (Branigan 2001a). First of all, Whitelaw (2001) approached Minoan towns quantitatively, comparing house sizes and numbers of inhabitants. Noticing a long-term standardisation in house size on Crete generally and at Gournia in particular, he suggested that Minoan society was made up of *nuclear families*. The presence at Palaikastro of "a considerable range of housing, for residents across the entire social spectrum" (Whitelaw 2001, 21) implied that a larger house represents a wealthier family. Similarly, when analysing Knossos in detail, his model implies a *hierarchically* constructed settlement with high class, semi-public residences close to the 'palace' and lower class dwellings and farms in the outskirts or suburbs. That this was certainly not always the case is evident at Knossos, where the Little Palace already falls outside the 'public/elite core' (cf. Whitelaw 2001, fig. 2.8), but also

at Malia (Maison Epsilon), and even at Gournia and Palaikastro, where the largest houses are in fact located further away from the palace (assuming that the 'palace' at Palaikastro is located where we think it is – to the southeast of Block Chi). In 1972, Branigan (1972, 756) had already suggested the idea that the *insulae* at Palaikastro could have belonged to a single man subleasing part of the block. MacGillivray and I continued upon this idea when we noted the mixing of seemingly poor and rich architectural and artefact assemblages within the confines of single town blocks at Roussolakkos and suggested that "each of the main blocks originally contained a clan or (extended) family unit the members of which, who did not leave through marriage, constructed houses against their ancestral home, the latter taking up functions (such as that reflected by the Palaikastro Hall) which were not repeated again in the same expanded family unit" (Driessen and MacGillivray 1989, 107). I think this explanation still holds for part of the Roussolakkos settlement but the individual houses revealed by the new excavations suggest that these were more likely to have been occupied by nuclear families, implying that the two social systems – clans, extended families or factions, on the one hand, and nuclear families, on the other hand – existed within the same settlement. It may be that the first system was by Late Minoan ('LM') I gradually superseded by the second but still remained the main type of social organisation within the 'old' and 'palatial' settlements (compare the debate on the Early Minoan site of Fournou Korifi: was it the house of a 'big man', of a clan, or was it composed of different nuclear family households? – see Whitelaw 1979).

In the same volume, Branigan also discussed elements of urban organisation, such as the absence of defensive wall circuits, the scarcity of public buildings (apart from the 'palaces') and the location of elite buildings, suggestive of what has been called the 'Absolute City', where the elite clustered around the rulers' palace (Branigan 2001b, 45, following Paul White). Cunningham (2001), continuing work carried out by Tsipopoulou (1997), added a detailed analysis of the town plans of Palaikastro, Petras and Zakros and, using social theory as developed by Hillier and Hanson (Hillier 1996; Hillier and Hanson 1984), stressed some important differences between the different towns.

Palyvou has recently tackled problems of interpreting open spaces in Minoan architecture (2002; 2004). Vansteenhuyse (2002) has also addressed the function of courts and plazas in Minoan Crete, arguing that these served for the gathering of masses and were central to the functioning of Minoan society.

Ariadne's threads

As mentioned in the introduction, my main interest in Minoan towns is their role as places of *interaction*, spaces where communication was organised and people could be manipulated. And here Cunningham's recent work (2001) may again be cited. Using social theory as detailed by Hillier and Hanson (Hillier 1996; Hillier and Hanson 1984), he was able to show how, at Zakros, the non-axial road system served a local population that seems to have been very homogenous, as suggested by the *absence* of transitional space between street and main room (apart from in a single house, Building G). At Palaikastro, however, he detected

a clear spatial segregation between street and main room through the incorporation of a vestibule and intermediate rooms. This, he argued, can be explained either as a result of the larger size and density of the town or because of a different social matrix – perhaps the clan system referred to earlier. The street system at Roussolakkos is indeed remarkably straight and regular, showing a high degree of axiality, suggesting that it “facilitates movement through the settlement rather than between the domestic buildings” (Cunningham 2001, 80). To some extent, this recalls Chrysoulaki’s main artery leading to the ‘economic lung’ of the settlement (Chrysoulaki and Platon 1990, 372) but the social implications are different. Cunningham adds his conviction that this street system was “specifically planned and created” (2001, 81) either by an abstract (e.g. ‘polis’ authorities) or “discrete” (‘ruler’) entity and that it facilitated the movement of non-residents through the settlement.

This last observation I think to be especially relevant where the major Minoan towns are concerned. Recently, I have suggested that the so-called Minoan ‘palaces’ were largely used by non-resident groups for integrative ritual actions (Driessen forthcoming a). *Non-resident* does not necessarily imply *non-local* but it can, and I think that part of the street system of some settlements, because of the special care given to its construction, dimensions and axiality, suggests precisely this: the use of these towns by non-resident people, as gathering places for visitors coming from a wider region. In fact, at Knossos and Malia, the houses show the same features as those at Palaikastro: intermediate rooms between street and main living room; whereas elsewhere, at Gournia and Pseira for example, the streets mostly give immediate access to the main living rooms. The function of the streets is therefore clearly different: on the one hand, they were almost non-local elements that were used by both a resident and a non-resident population; on the other hand, they were almost an integral part of the house, as is still the case in traditional Cretan villages (cf. Creutzberg 1933). It is here proposed that the plan and lay-out of some Minoan towns was dictated by their function as an interregional meeting place for residents and non-residents and that in these cases the *priority of access routes to the communication device* – the central court or, in some cases, another attention focussing point – decided the town’s development. And it is here that Ariadne helps by giving us her threads, fossilised into what we call *raised walks*, the Minoan ‘red carpet’ that helped the non-resident to reach his or her destination – the Minoan lines (Fig. 4.1; Branigan (2001b, 41) calls these “principal roads with raised ribs”). I understand as a raised walk the presence, within a street or court paved with cobblestones (*kalderim*), of a slightly higher, single or dual regular paved line in either limestone or *ammouda*. A paved street is functional – for example, it saves the pedestrian from getting their feet wet; a raised walk is like a traffic sign, signalling to people which route to take and undoubtedly what to expect at the end. But there may be more to it.

Although similar architectural features occasionally occurred in the contemporary Near East – at Mari and Tell Asmar, for example, and perhaps Pharaonic Egypt (close to the Unas pyramid), or even, much later, in Persepolis – the Minoans used raised walks more systematically as ‘Ariadne’s threads’ throughout some of their settlements, and it is these causeways that allow us to reconstruct the communicative potential of the settlement. Although these raised walks are a well-known feature of Minoan archaeology, they have rarely



Figure 4.1 Malia. Raised walk between Palace north entrance and the Hypostyle Crypte.

only in the 'Main Street' (between Block Chi and the excavated houses at Ksi and Sigma), probably the principal artery through the town, that we encounter the raised walk (the street is about 313m long but no detailed plan exists to show precisely what part of the street was given a raised walk). The contrast between this large, axial and carefully laid-out street and the other alley-like roads is surprising, even if some of the latter are also partly paved, as those in the new excavations (e.g. MacGillivray *et al.* 1988, 266). A test in the Main Street showed that the system was established at least in the Middle Bronze Age but was repaired in LM IA, LM IB and, surprisingly enough, in LM II/IIIA1 (MacGillivray *et al.* 1998, 262–4). We do not know yet where the system started in the west or where it eventually led to in the east. It arrived at the open square near Block Chi, but whether it continued to the assumed central building to the southeast of Block Chi is not yet known.

At Zakros, only an earlier Neopalatial phase of the 'Harbour Road' showed a *kalderim* road framing a central passageway of regular slabs of white stone (N. Platon 1974, 248). This seems to relate to an earlier entrance system into an area where, in the mature LM IA phase or early in LM IB, the palace was constructed (L. Platon 2002, 151–3), but it appears that in LM IA/B, a simple cobblestone paving led to the palace. If L. Platon is right in dating the palace to such an advanced phase, it is possible that a major open court existed previously at the foot of the hill occupied by the town, and that the fine plastered court (L.

been given proper consideration, which is why I will summarise some of the more pertinent cases but also highlight some of the lesser known examples; they will be given fuller attention in a study that is in progress (Driessen forthcoming b).

Warren has stressed their standardised size and construction at Knossos, but the same is true for all major settlements. First the negative evidence: so far there are no traces of raised walks at Pseira, Mochlos, Makryghialos, Chania (although the paved area in Daskalogianni street may suggest its presence nearby – Vlasaki 2002), Galatas, Petras or Gournia (although a line of raised cobblestones in the passage/street/corridor west of the palace may conceivably be considered as such) and the smaller sites. At Palaikastro, it is, at present,

Platon 2002, pl. XLVIIa) that lies beneath the later Central Court belongs to a gathering place of the community before the space was appropriated by the palace proper.

At Kastelli Pediados, Rethemiotakis (1996) found a raised walk ending at the entrance of a building in which he found evidence for feasting. At Tylissos there are also remains of raised walks leading to or from the entrances of Houses A and C (Hazzidakis 1934, 9). The same is probably the case at Mitropolis-Kannia in the Mesara (Levi 1959) and the Middle Minoan court at

Kommos also seems to have a raised walk crossing it. At Myrtos-Pyrgos, a raised walk forms a boardwalk next to the principal building of the settlement and another connects the settlement with the adjacent communal tomb (Cadogan 1978). At Archanes, near the modern Ayios Nikolaos church, three phases of paving, crossed diagonally by as many as five raised walks, were identified in a small area south of the palatial building (Sakellarakis and Sapouna-Sakellarakis 1997, 120–7), perhaps with some kind of altar located next to it, as shown in the reconstruction. Although slightly different in construction, a raised walk also leads through the court at Nirou Chani in the direction of the stepped platform, next to which large horns of consecration were found. At Kato Symi, a processional road exists but as far as I can tell this is an entirely paved ramp and not a raised walk (the most recent plan is in Lebessi, Muhly and Papasavvas 2004, pl. II).

It is especially at Malia where the raised walks are well preserved (Fig. 4.2). Their original construction dates to the beginning of the Middle Bronze Age and those found near Quartier Mu and around the Agora show how they provided direct access to either a building or an important square. To the west of Quartier Mu, a very wide paving of *ammouda* slabs provided access, in a first phase, to the building. When a small cult area was placed against the façade further to the north, this area was also given a *kalderim* paving crossed by a raised walk, with a diagonal branch running up to the entrance of Building B. Although not published in detail yet, it appears from the plan that the raised walk may date to an advanced, Middle Minoan, phase of the site, and that the diagonal branch is even later (but still Middle Minoan). Around the Agora, two raised walks arrive from the north to what is now called the ‘cemetery gate’; these cross diagonally an east-west branch, called la ‘rue traversière’ (van Effenterre 1980, 189), which originally seems to have led east, around the agora, in the direction of the palace. To

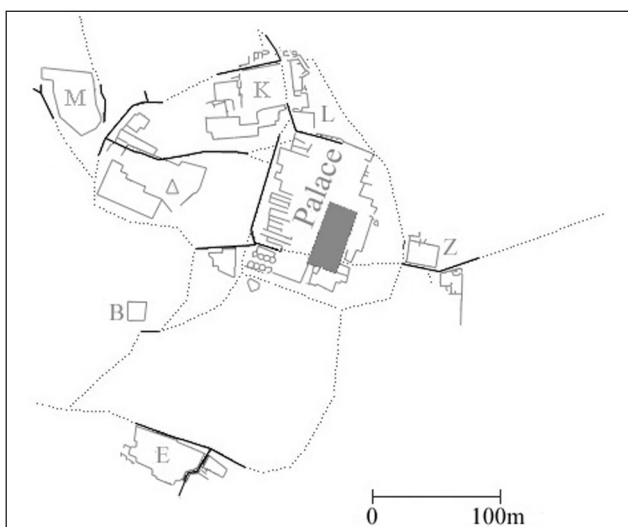


Figure 4.2 Malia. Simplified street system (P. Hacıgüzeller).

the north-east, however, the latter system was abandoned by the Neopalatial period. Near the palace, the raised walk system is more complicated. To the west, there may have been two points of departure, one to the north and one to the south. The northern branch may have connected the Hypostyle Crypt area and the North Entrance of the palace (Fig. 4.1). The southern branch – perhaps originally starting from the shrine beneath the Stratigraphical Museum – arrived at a cross junction close to the silo area, east of the Magasins Dessenne, perhaps also flanked by a raised walk. Here, a branch leads north, all along the west façade of the palace, and another branch leads north-east to a rectangular paved area immediately north of the silos (Fig. 4.3). This paved area is itself, in a very Minoan way, also connected to the north-south branch, resulting in a triangular or diagonal plan. A short side-branch to the east connected the north-south branch with an entrance in the west façade. Part of this system was abandoned by the time the Neopalatial palace was constructed and some branches obviously lost their function altogether. Whether the poor preservation of the raised walk at some points suggests that the entire court was left to deteriorate is difficult to say. To the east of the palace yet another system exists, which has only been explored partially. What is certain, however, is that it started at what is considered the eastern town gate in the Middle Minoan period and led straight to the Central Court (Driessen 1997). It is also certain that this system was partly abandoned by LM I. Indeed, some of the Neopalatial houses are actually built on top of the road and it is very likely that the orthostate *ammouda* slabs that run along the façade of Maison Zita-Gamma represent robbed-out and reused slabs of the raised walk. In Quartier Epsilon, part of a raised walk system runs in the street north of Maison Ea, continuing around the southeast corner leading south; I. Bradfer has cleared other systems in Quartier Delta.

At Phaistos, as shown again recently by Tomasello (1998), raised walks cross the Protopalatial West Court, leading down from the north, from above the Theatral Area, to an area in the west façade where there may have been an entrance to the palace (Fig. 4.4). There are two side branches: the smaller comes from a non-defined area to the west and meets the main artery, while the larger leaves the main artery and runs east to reach the main entrance in the west façade. It may be observed that in both cases, the area has to be crossed diagonally, and the branch leading to the west entrance is not the main artery. There is some evidence for the existence of a raised walk higher up, in the Northwest Court: originally, after having crossed the court diagonally (this area was destroyed by a Geometric house), it may have linked with the lower system. The lower system was entirely abandoned by the Neopalatial period. Oddly enough, within the Phaistos palace, there is also a paved court (XXXV) crossed diagonally by a raised walk; this is, as far as I know, together with the Kommos example, the only internal example in Minoan architecture and it compares well with those found in the Near East, at Asmar and Mari.

At Knossos, using Hutchinson's test and other information from Evans's and Mackenzie's excavation diaries, Fotou has been able to reconstruct a West Court far more extensive than the area nowadays visible, stretching out, at different levels and crossed by several raised walks, perhaps more than 130m to the west of the palace façade (Fotou (2004, 98) stresses the "unobstructed view"). Warren's study had already suggested something similar (cf. Warren 1994, 197–8, figs 4–5) when he connected Hutchinson's tests with his own

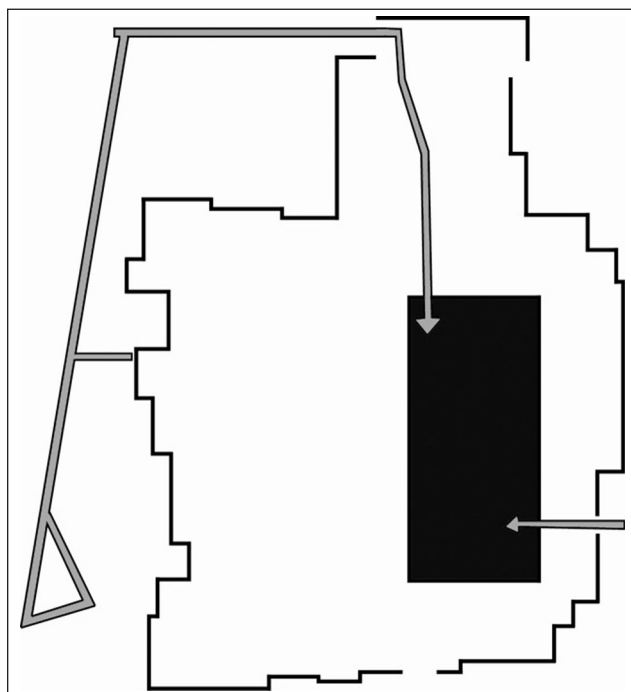


Figure 4.3 Malia. Raised walks and access to the Palace (Q. Letesson).

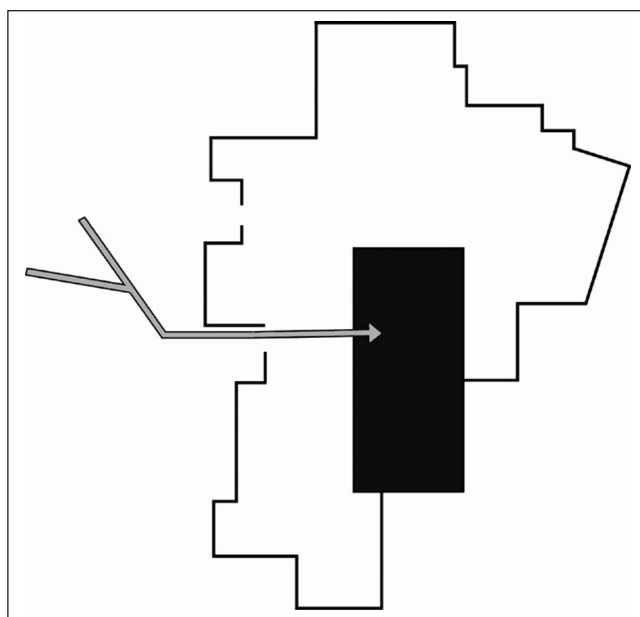


Figure 4.4 Phaistos. Raised walks and access to the Palace (Q. Letesson).

near the Royal Road. As far as can be made out, however, raised walks exist only to the west of the palace, where they criss-cross the West Court and provide access, on the one hand, to the Theatral Area and northern entrance, and on the other hand, to the west entrance of the palace (Fig. 4.5). In the modern car park area, the West Court and the Theatral Area, the diagonality is striking.

This short review clearly highlights several elements of the raised walks. The first is that they were quite common in Minoan architecture, during

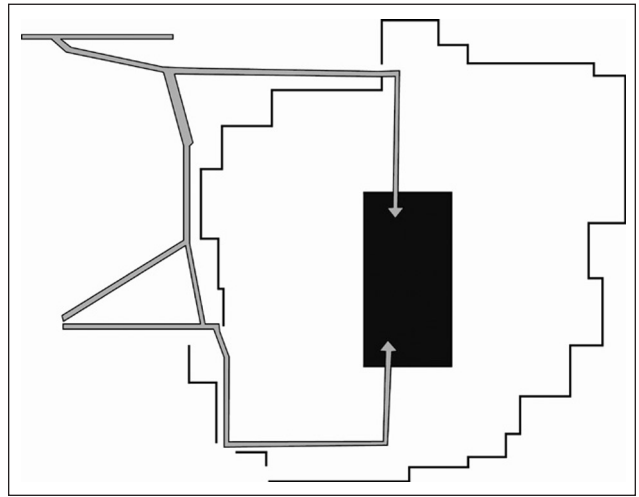


Figure 4.5 Knossos. Raised walks and access to the Palace (Q. Letesson).

both the Proto- and Neopalatial periods, but were limited to important sites. Second, they both occur within streets and cross open areas. In the latter case, they may be interpreted simply as a continuation of the former, but perhaps not always. Third, they lead especially to the entrances of important buildings – ‘palaces’ mostly but not exclusively – as well as simply to courts or plazas and to attention-focussing devices, as at Nirou Chani and perhaps Archanes. It cannot be excluded that such devices were more common but movable and are thus rarely found. Fourth, occasionally, as at Knossos, Malia, Palaikastro and Archanes, different modifications of raised walks were observed which implies an element of permanence and intergenerational importance of the system. However, at Phaistos certainly and partly also at Knossos and Malia, large sections of the raised walk system were abandoned by the Neopalatial period; also at Zakros, the raised walk seems not to be associated with the LM IB palace. This implies that certain Protopalatial (and early Neopalatial) rituals were no longer considered important or, perhaps, that access routes that once needed formalisation were now part of the urban scheme and no longer required external signalling.

Fifth, there is some evidence that the raised walks did not form a means but an end: the section crossing the court at Kommos and the instances of causeways diagonally crossing open areas suggest that they served as guide-lines, as fossilised movement and performance markers. The diagonality was obviously looked for even if no obvious reasons for its presence can now be identified (Figs 4.3–5). Crossing an open space in a diagonal way, however, prolongs the experience, it enhances the performance and theatricality of the movement. This is so in most Near Eastern temples, where temple court doorways are diagonally placed for the same reasons, and the above-mentioned examples at Tell Asmar and Mari stress this point. Whether the diagonality reflected a specific astronomical or ritual

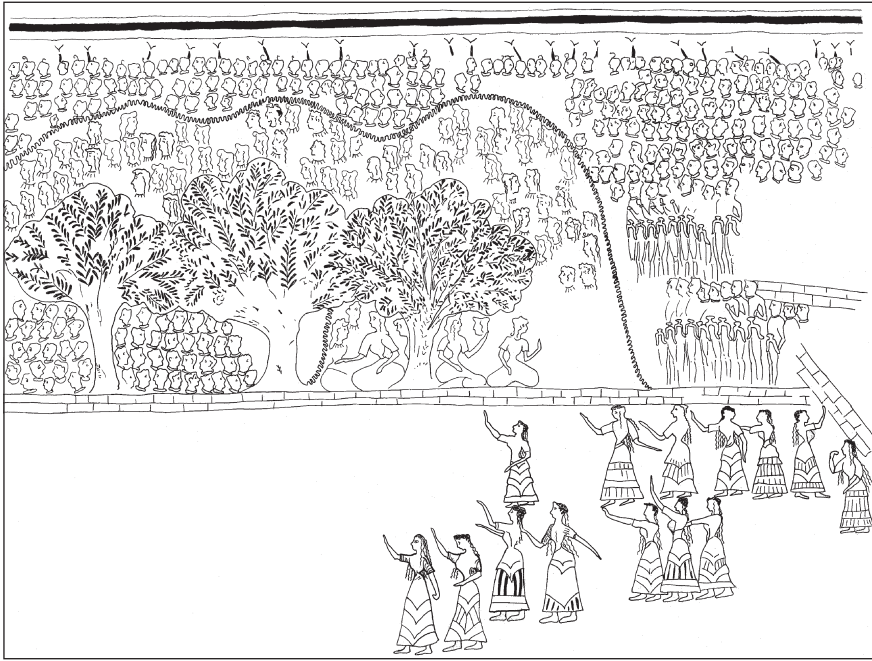


Figure 4.6. Knossos. Sacred Grove and Dance Miniature Fresco showing raised walks (D. Riccardi-Percy after A.J. Evans, *Palace of Minos III*, Plate XVIII).

practice is difficult to detect but, for comparison, the diagonal/triangular scheme shown by the lay-out of the Gizeh pyramids may be mentioned (Spence 2000). Similar concerns may also have dictated Minoan ritual processions. Finally, especially at Malia but perhaps also at Zakros, Palaikastro, Phaistos, Tylissos and Knossos, we may assume that the system started at the town's edge and guided non-resident visitors to their destination.

Conclusions

Roads with raised walks were undoubtedly processional ways and their culmination in triangular or diagonal formations was clearly part of a specific ritual movement. This is corroborated by one of the Miniature Frescoes of Knossos (Fig. 4.6), which in a most eloquent way associates raised walks and people in processions and/or dances on the occasion of some festival; interestingly enough, the diagonality is given emphasis, as is the standardisation and care of the walks' construction.

This shows again how one type of Minoan town – Fox (1977) might call these the 'regal-ritual type', in contrast to the 'commercial/mercantile' and 'administrative' cities – should be understood as a holistic entity in which the main circulation arteries developed almost entirely in connection with rituals that went on within the court centres and where ceremonial routes connected the countryside to the city core. A good parallel for such an

evolution is provided by the Panathenaic Road at Athens, which connected the countryside with Athens and received much fuller architectural elaboration than other urban roads and always remained the main artery of the city (I owe this comparison to J. Shear (pers. comm.)). But throughout the Greek and Roman world, ceremonial roads or sacred ways influenced the lay-out of towns, sanctuaries and the country-side between. Zakros, Psira, Mochlos, Gournia, Galatas and other sites that might have incorporated a so-called 'palace' only in their Neopalatial phase, had to be specially adapted and here Damiani Indelicato may have been right: the pre-existing road system probably also led to an open place, a town or village square, and this was the most appropriate place to establish the ceremonial meeting place when the palace was constructed. This may perhaps be best detected at Gournia, where part of the street next to the 'palace' – but leading to the public square – was straightened and embellished in the Neopalatial period. Neopalatial 'palaces' developed out of Early and Middle Minoan ceremonial court centres in which the priority of access routes between countryside and meeting place was primordial. By LM IB, however, the courts had obviously lost some of their original importance and the buildings themselves received more attention, perhaps because they now formed the seat of a more individual rather than a corporate power.

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5 Town Planning in Palatial Mycenae

Elizabeth B. French

My field work as Director of the British School at Athens was a project to record all the known surface evidence (published, recorded only in notebooks, and unrecorded) from the area surrounding the Citadel at Mycenae. For three full seasons from 1991 to 1993 we surveyed and recorded, checking in particular everything that had been noted on the surface by Steffen (1884, prepared in 1881–2) to see if it survived. This was a joint project under the auspices of the Archaeological Society of Athens (who added to the publication a coordinated plan of the surface remains and excavation plans from the citadel), which finally appeared with a series of totally new maps at the end of 2003 (Iakovides and French 2003). References to these maps are given below where appropriate (but not detailed page references to the text, as it forms the background to the whole of this paper). Prior to this survey, the only previous comprehensive map of the area was that published by Steffen (1884) after the work of Schliemann but before that of Tsountas and his successors. Wace (1949) and Mylonas (1966) still formed the only full authoritative general accounts; the difficulties this caused are clear in the summary in Hope Simpson and Dickinson (1979). Unfortunately, although the results of our new work were sent to them prior to publication, Cavanagh and Mee (1998) were not able to make use of them.

As those who have taken part in collection surveys will realize, walking a landscape for several weeks at a time gives one a particular insight into the way it is and was used. The link between antiquity and today is shown by Kim Shelton's inspired realization that Tsountas' list of tombs and their measurements, which appeared totally random, was in fact in the order needed to get quick and easy access from one terrace of tombs to another – a realization that allowed the identification of several more of the many unpublished tombs from his excavations (Shelton 1993). The team came to know the countryside around Mycenae very well, spotting tombs and terrace walls from afar even amid the thick garigue. The points recorded were plotted the next day by our architect on specially enlarged copies of the Greek Army 1:5,000 map and the result was checked by the archaeologists for obvious errors (on each side). When the information was ultimately put together, we found we had reached a number of rather startling conclusions. For simplicity these can be grouped into those concerning the relation of the tombs to the Citadel and those concerning the great diversity of 'public works'.

The tomb landscape

At the moment we know of over 200 chamber tombs in some 27 distinct cemeteries (Fig. 5.1). But the theory advanced by Tsountas (Tsountas and Manatt 1897, 33) and accepted by my father (Wace 1949, 103 and even as late as 1956, 122) among many others, that each cemetery represented a small satellite site, cannot be sustained. This idea seems to derive from Thucydides' (I, 10) description of Sparta and can be traced back at least to the

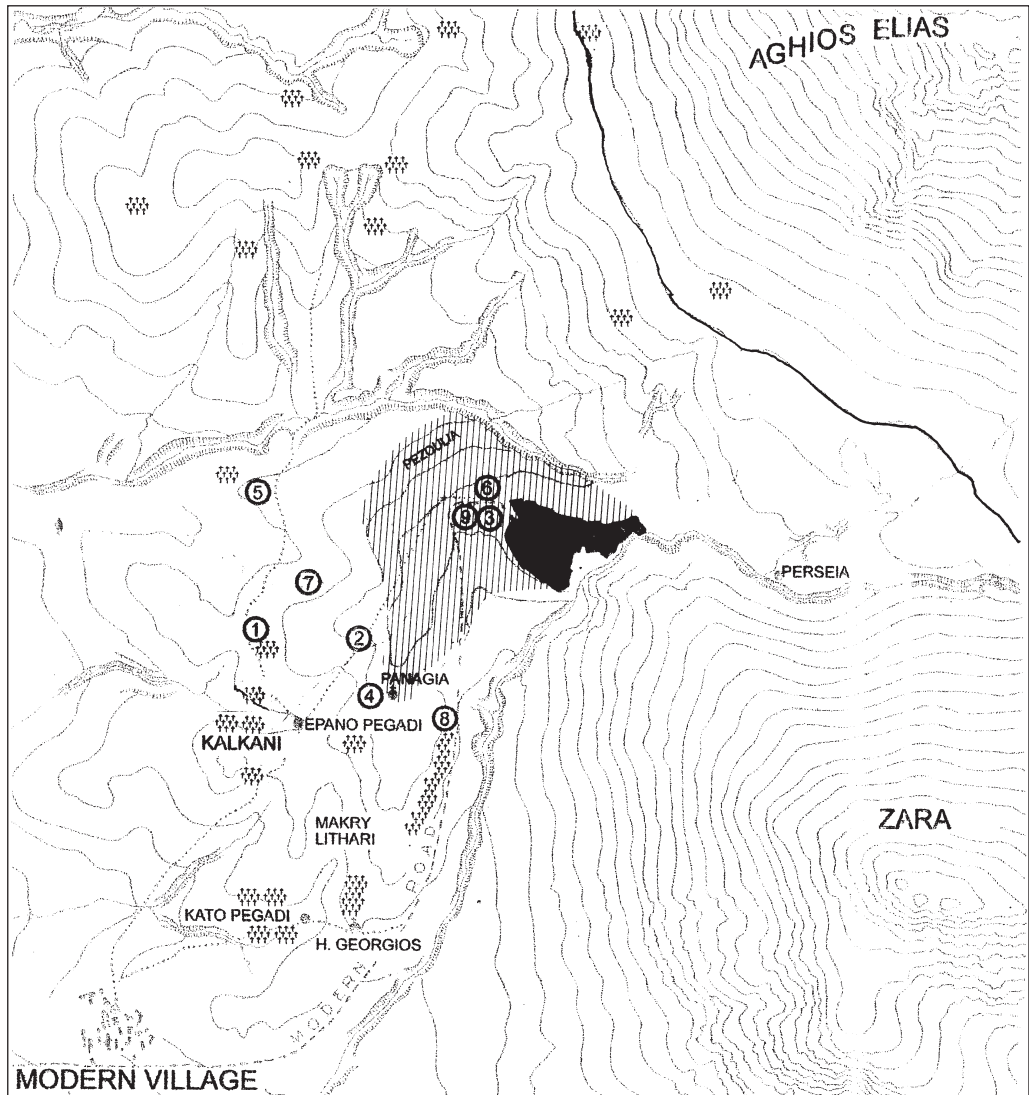


Figure 5.1 Plan of the Mycenae area in the Early Palatial period, showing settlement area (shaded), tholoi (numbered) and chamber tomb cemeteries (crosses). From French and Shelton 2005, 179 fig. 3.

description of Mycenae by Mure (1842 vol. II, 166) who visited in 1838 – though I do not know if this account was known to Tsountas. The problem is that there are absolutely no traces of these satellite sites in the relevant areas. There are many Bronze Age building remains still identifiable on the surface around Mycenae today, but no villages or farmsteads are apparent near the tombs even in the areas of uncultivated upland terrain. The only such structure known in the whole area is the farmstead at Chani (J1:01), which was found when testing the adjacent fields following the excavation of the burial platform (J1:02), which itself had been found by deep ploughing for the planting of trees (not noted in Cavanagh and Mee 1998). But this is one area where there are no tombs, nor is there any rock suitable for them.

How then can the grouping of tombs be interpreted? A very high proportion of these groups (if not all) originated in Late Helladic ('LH') II – again improved information. At present the earliest known tomb is in the Kalkani S cemetery – going back well into the period of Grave Circle A – but the distant Souleimani group is almost as early (French and Shelton 2005). Certainly all groups are served by the road system which, as preserved, is of Palatial date (see below) but appears to be based on an earlier less sophisticated network. The roads may not have been built to service the tombs, however, as there is frequently evidence for the exploitation of natural resources such as clay and stone in these outlying areas. It seems likely that the tomb groupings are based on land holdings and the various resources would have been under the ownership or control of families or clans. How the tholos tombs, in their apparent three groups of three, relate to the chamber tombs is not at present clear as there are several cemeteries roughly equidistant from two of the groups of tholoi and none near the imposing Citadel group (French and Shelton 2005).

The absence of chamber tombs close to the Citadel leads to another important conclusion – and indeed the “town planning” of my title. After a certain point in time the areas of settlement and the areas used for tombs were deliberately kept distinct. There is one chamber tomb immediately south of Grave Circle B (D4B) (sometimes erroneously called Tomb 220 or 222, apparently from the adjacent contour line). There is also a cutting in the rock beneath the East Room of the House of Shields which was interpreted as the dromos of a chamber tomb (D4F). The suggestion is that this was a tomb started and then abandoned – though there is no problem with the rock or any other potential constructional difficulty. For this we have a date, as the terrace on which this section of the House was built contained pottery of LH IIIA2 just into the beginning of LH III B1 (French 1965, 185–92). The date of the tomb south of Grave Circle B is less certain as the pottery has not been studied in detail (even if it survives) and the published account is indecisive (Papadimitriou 1952, 468–72; 1953, 207–9). (This tomb is of course better known for its interpretation as of possible cultic significance in the Geometric period, discussed by Antonaccio (1995, 47–8 and fig. 3) and now being restudied by Gunnell Ekroth of the Swedish Institute).

The settlement of Mycenae covers the lower slopes of the acropolis hill facing west and extending into the first valley to the north and along the top of the Atreus (or Panagia) ridge. The slopes lower down that ridge are used for tombs but the terrain allows them to

be distinct. On the east slope is the Third Kilometre cemetery, to the south of the Treasury of Atreus and including two particularly striking tombs: 102, which Bevan (2007, 160–1) has recently compared for its finds to the Isopata Royal Tomb (Evans 1906), and Mycenae Tomb 505 (Wace 1932, 12–18), the largest and perhaps best cut tomb yet known. The tombs on the West slope are only slightly less impressive and the Panagia Tholos would seem to belong with them. Unfortunately the structures on the top of the ridge are heavily eroded (*e.g.* E4:16) except where terraces were used to extend the available space as in the so-called House of Lead (E4:11). There is no good evidence of the function of any of them. Thus we are suggesting that from sometime around 1300 BC there may have been deliberate regulation of land usage and that from that period no tombs were to be cut in areas set aside for settlement. This shows clearly in contrasting the map of the area west of the ridge (Atlas Map 6) with that to the east (Atlas Map 7).

'Public Works'

What else do we know of this period? It is extremely difficult to date the major building features at Mycenae (see for example Mylonas 1962) as much depends on small deposits of pottery in crucial positions – which are inevitably largely of unpainted wares and which are always subject to the *caveat* that sherds give only a *terminus post quem* – and on the interrelation of walls, which may have been at times heavily disturbed by restoration. It has been clear for many years that following the Early Palatial period with its plethora of tholos tomb building and some form of centre on the summit of the Citadel, a skilled work force was carefully managed, alternating between tomb and civic construction. Within the fourteenth century we see the building of the last tholos tombs, Atreus and Clytemnestra. The first Citadel walls were constructed, in my view, in the period between the building of these two tombs. Very soon after the walls the first terraced Palace was constructed, which makes integral use of the new walls to expand the area available for building. There must have been something on the summit between the Early Palatial structure and this but we have only minimal traces of it. This interplay between the walls and the Palace terrace is perhaps the first sign of our Town Planning. The date suggested for this last stage, Palace IV, is late in LH IIIA2 (for recent discussions of the series of Palaces see French 2002 and French and Shelton 2005).

But after the construction both of Palace IV and the Tomb of Clytemnestra the use of the work force seems to have diversified. In the early years of LH IIIB1 (the end of the fourteenth/beginning of the thirteenth century in conventional terms) there is building everywhere but of rather a different kind from what had been undertaken previously, as discussed below. The so-called Houses are strongly built, mainly on terraces which allowed the space available to be expanded and contributed considerably to the strength of the structures. It seems likely that an earthquake disaster had occurred at the end of the previous period which led to this change of practice (French 1996).

Another development which is again very difficult to date – and a subject of current controversy among those working on the site (Wardle 2003) – is the exact date of the

new West Citadel wall. To my present argument this is probably unimportant but the refurbishment of the Grave Circle which it involved was a major part of this 'development' and this is a feature of urban organisation in many ways unique in antiquity. It cannot be determined whether the impetus for the west extension was the need for further space within the walls, the desire to include the Grave Circle as a symbol within the walls, or the desire to include the Cult Centre within them. But whatever the impetus, the result required detailed planning and reorganisation which can only have come from a strong central authority – however it was organised.

The probability is that many of the 'public works' belong to the early thirteenth century. There is a potential chronological linkage from the House of the Oil Merchant to the road system and thus to the bridges etc. The road system has been well studied recently by several scholars (notably Jansen 2002 and the late John Lavery 1990 and 1995). Though the surviving evidence shows a network extending mainly towards the north we know for certain that there were at least two leading south towards Argos and towards the Heraion. Much of these has been destroyed by agriculture over the years. Moreover, it should not be forgotten that Deilaki (1991) identified long stretches of a road leading from the Argolid to the Saronic Gulf – another important trade route.

Apparently connected to both the settlement and the road system are two "Mansions" identified by Lavery (C3:06, C4:29). These lie at the very edge of the settlement where the road passes outwards. Neither has been excavated and thus any interpretation is totally speculative, but they may have acted as some kind of 'official' control point. They are definitely better built than the adjacent structures. This is not the case with the southernmost structure on the Atreus Ridge (E4:16). We cleared it in what proved a futile attempt to interpret its function. In the end none of us agreed. The building is not especially well built and the plan has no really obvious parallels. Moreover there does not seem to be a full roadway along the Ridge; the terrain, especially at the southern end, precludes this but there was doubtless some kind of path or track. It remains problematic.

But there is another class of public works which has not yet been fully studied (though see Loader 1998). There is an elaborate and carefully constructed system of water control consisting of revetments at the side of streams to prevent damage from flash flood and of low weirs to control and manage the force of the streams. As well as facilitating irrigation and other agricultural practices, these could also have supplied the areas of shallow water over stone or rock which are so useful for laundry. I do not include with these features the "water reservoir" which Knauss (1996, 1–70; 1997) believes was held up by the Agios Giorgios Bridge, since the revetments at the sides on which he bases his argument are in fact the terrace walling of the later Shrine by the Bridge (F4:16 often known as the Agamemnoneion). We may note that whenever the Kofini dam east of Tiryns (Verdelis 1963; Zanger 1993, 80) was originally constructed (my own theory is that it dates from Early Helladic – based on Verdelis' personal communication – but was damaged by flash flood and had to be repaired), extensive building did take place there in the thirteenth century, though possibly towards its end.

If we are correct in our dating of all these phenomena at Mycenae to the thirteenth

century, this could be linked to the systems of strict palatial control suggested by Voutsaki (2001, 203). In that paper she exempted Mycenae itself from the sumptuary controls on elite mortuary practice that she was postulating, but Jacke Phillips (who is currently carrying out a complete restudy of all Egyptian and egyptianising items found at Mycenae in the light of recent improvements in our understanding of their contexts) and I have since shown decisively that they are as valid at Mycenae as elsewhere. It is not only at the minor sites, but also at Mycenae itself, that there are no imported items manufactured after 1300 BC except for a few typically unimpressive scarabs (Phillips 2005, 460–1). The long-noted relative “poverty” of chamber tombs in LH IIIB (Tsountas 1888, 167) may be not so much fashion (as I have been suggesting over the years – *e.g.* French 1971, 107) as the result of strict palatial economic control.

Finally, though it is assumed that technically ‘palatial control’ ends with the destruction of the Palaces (around 1200 BC), there is clearly some kind of very effective governance in force in the subsequent period of reconstruction. This had already been marked by Kilian for Tiryns 25 years ago (Kilian 1988, 135) but is also well demonstrated by the early Post-palatial material (both architecture and moveable artifacts) at Mycenae (French 1999; forthcoming a; forthcoming b).

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6 Post-Palatial Urbanization: Some Lost Opportunities

Irene S. Lemos, Antonia Livieratou and Marina Thomatos

Introduction

Recent discussions of the importance of ‘urbanization’ in the Mediterranean have resulted in reconsidering the term and questioning traditional criteria which have in the past been regarded as fundamental for its definition. The need for more flexible criteria which can be adapted to a variety of local circumstances is a common theme in recent reviews (Hall 1997, 90–2; Vink 1997; Cherry and Davis 2001, 141; Osborne 2005; de Polignac 2005). Another important focus of recent studies is the complex and long paths of social change, through which the Early Iron Age (‘EIA’) societies of Greece reached the status of *poleis* (Morris 1987, esp. 171–210; 1991; Whitley 1991; Lemos 2002, esp. 224). It has been acknowledged, for example, that “an appreciation of the emergence and structures of the *polis* has to begin with the collapse of the Mycenaean world” (Morris 1991, 48). But in general the very beginning of the transition from the Late Bronze Age (‘LBA’) to the EIA – the Late Helladic IIIC period (which covers roughly most of the eleventh century BC and has been subdivided into an early, middle-developed, middle-advanced and late stages) – is overlooked.

Although past discussion of Late Bronze Age urbanism is mostly concerned with the palatial stage of the Mycenaean period (Bennet and Shelmerdine 2001; Cavanagh 2001; Cherry and Davis 2001), this article aims to bring into focus developments in the Late Helladic (‘LH’) IIIC period, during which palatial organization was abandoned. Another significant reason for a closer study of LH IIIC in the context of urbanization is the large amount of information recently gained through new or ongoing excavations and the latest research on the material culture of the period. Our knowledge of LH IIIC has advanced significantly over the last forty years since its initial recognition as a significant stage in the transition from the LBA to the EIA. In spite of the persisting lack of published material from major sites such as Mycenae and Tiryns or the difficulties in understanding LH IIIC chronology and synchronism, progress is gradually being achieved thanks to the publication of other sites, such as the LH IIIC settlement on Xeropolis Lefkandi (Evely 2006, excavated by Popham and Sackett in the 1960s; Popham and Sackett 1968). Significant contributions also derive from a series of workshops organized by Deger-Jalkotzy and Zavadil (2003; Deger-Jalkotzy forthcoming) as well as specialized studies dedicated to the period (Thomatos 2006; Vlachopoulos 2007).

We have turned our attention to two sites, Tiryns and Koukounaries – representing different

types of post-palatial settlements (Thomatos 2005). Moreover, they have been selected due to their great significance during LH IIIC, as well as their dissimilarities in their previous and later histories. Thus, they can reveal interesting aspects of the decisions taken by the leaders of their communities during these periods. Tiryns is examined first; it combines a great palatial past with a revival and expansion during LH IIIC. In contrast, Koukounaries is a new settlement which was founded in LH IIIC and continues into the EIA.

Tiryns

Tiryns (Fig. 6.1) was one of the dominant Mycenaean centres of the Argolid in palatial times. The following account is based on preliminary reports as well as a number of specialized studies of the site (such as Albers 1994). The current excavations at Tiryns, under the direction of Joseph Maran, might confirm or challenge our present reading of the archaeology of this important site.

The acropolis of Tiryns consisted of the so-called Upper and Lower Citadels, while the outer settlement, the Lower Town, lay around it. The Great Megaron and the Great Court in front of it, and other palatial buildings, are located in the Upper Citadel. This complex was the seat of the ruler and his entourage, and the arena for the performance of religious and political ceremonies. The Lower Citadel accommodated several multipurpose buildings including residential quarters, storerooms, workshops and cult rooms, most of them situated in the western part around a narrow and long court that stretched parallel to the fortification wall. The buildings were erected upon terraces built against the ascending slope of the mound.

The LH IIIC Citadel (Figs 6.2–3)

In LH IIIC, after the devastating destruction that hit Tiryns at the end of LH IIIB2, the settlement inside and outside the Citadel was rebuilt and continued to be inhabited. The Upper Citadel, however, was still covered with ruins, with only the so-called ‘Building T’, which was erected over the eastern part of the Great Megaron, still standing (Fig. 6.2). The building measures 20.9m in length by 6.9m in width, and consists of two rooms, a square porch to the south and an elongated room to the north, divided into two aisles by a row of columns running along its central longitudinal axis (Mazarakis Ainian 1997, 159; Maran 2001, 113–4). Kilian suggested that Building T was deliberately aligned with the Great Megaron’s eastern wall in order to incorporate the area where the Mycenaean throne was situated (Kilian 1981a, 160; 1981b, 51–3; Maran 2001, 115). In this way, one of the key concepts symbolizing palatial authority was retained, denoting “the continuing focuses of social hierarchy on one person” (Maran 2001, 115).

The dating and function of this building have been in the centre of a long controversy, which started soon after it was discovered in 1884 (see Maran 2000, 3–4 for a selection of the bibliography). New evidence that has recently come to light appears to date the building to LH IIIC. C14 dating of wooden fragments found in two postholes of Building T has indicated that it had to date earlier than the eleventh century BC. Thus, since the

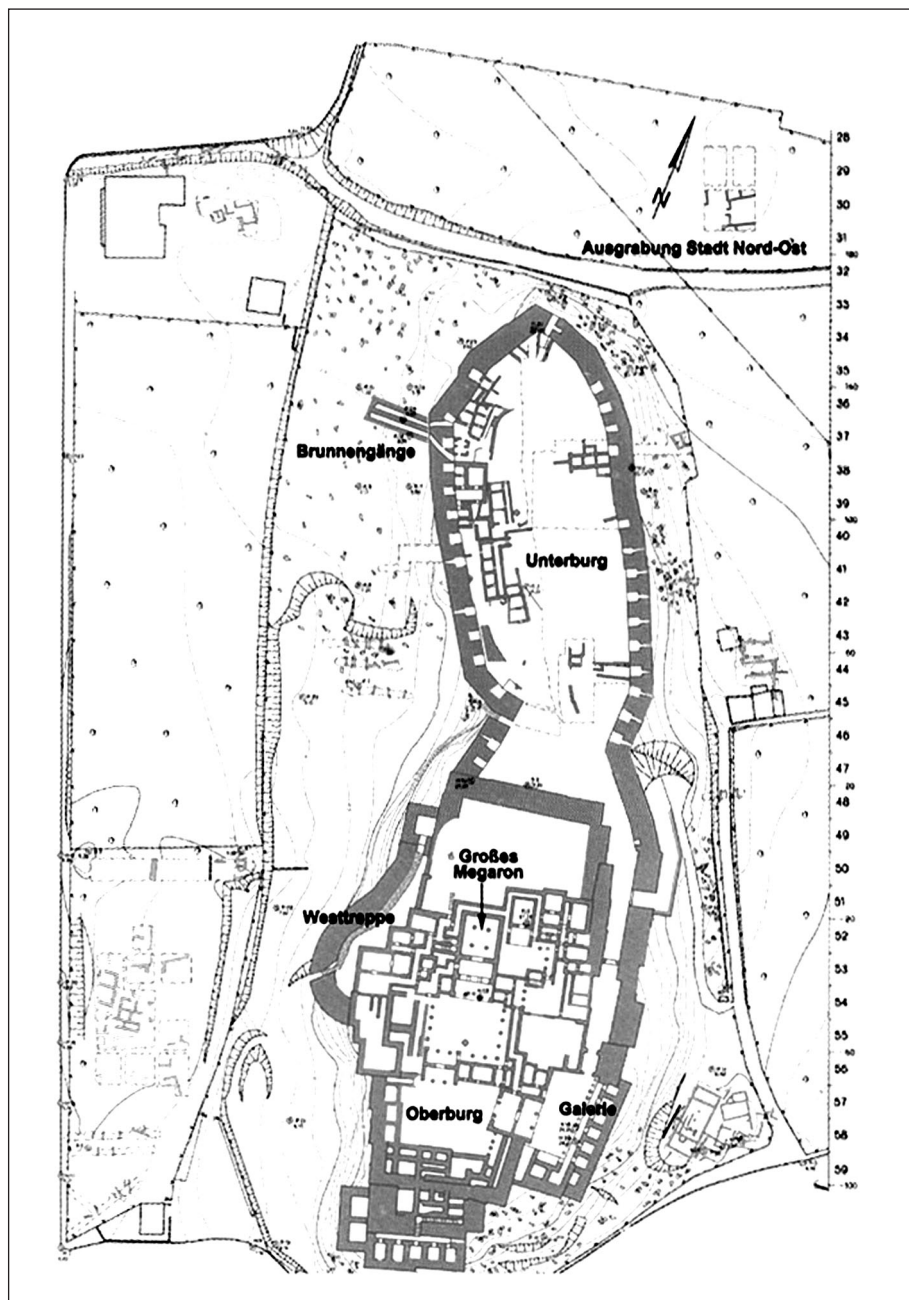


Figure 6.1 General plan of the Citadel of Tiryns and surrounding area. Adapted from Rieger and Böser 1990, plan 4.

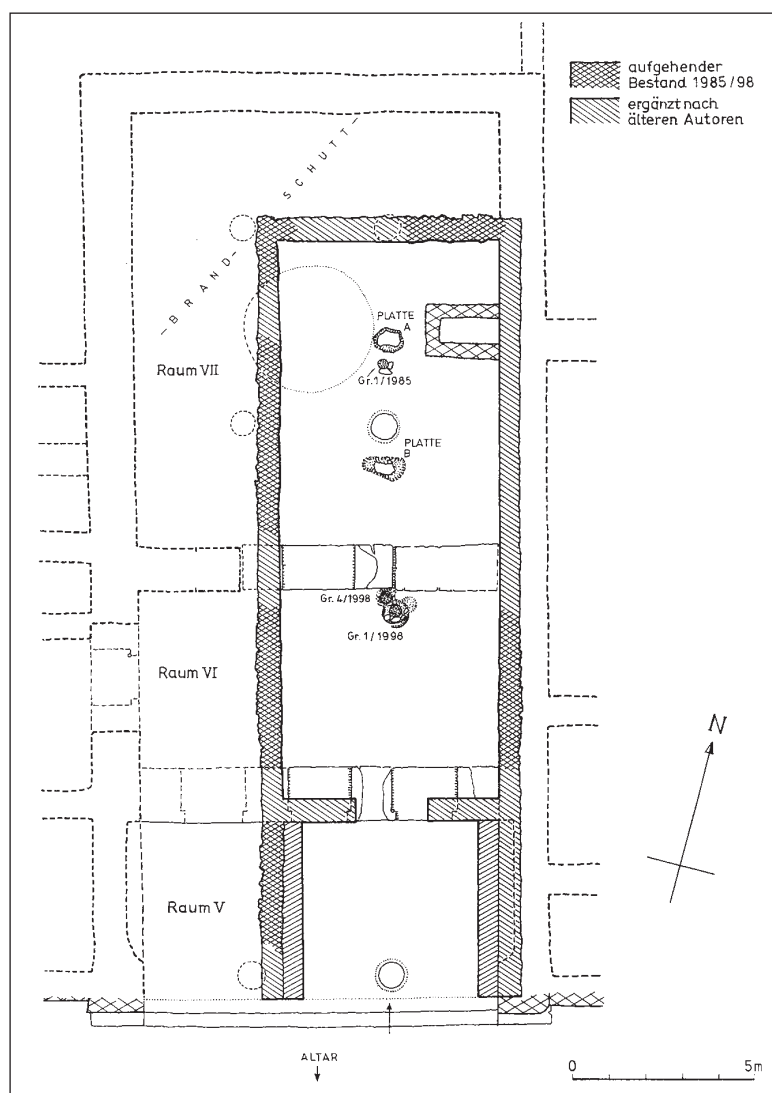


Figure 6.2 Upper Citadel of Tiryns with Building T. Adapted from Maran 2000, 2 fig. 1.

Great Megaron was destroyed at around 1200 BC, the post-holes and Building T should date to the twelfth century BC (Maran 2000, 15; 2001, 115).

A LH IIIC date should also be given to the twelve storage vessels that stood along the interior of the North wall of the Great Megaron, as indicated by their impressions in the coarse mortar that covered the floor here. Although there is no evidence for their date, Maran believes that it is “more likely that they were installed after the destruction of the palace [...] in a sort of backyard” (Maran 2001, 118, pl. XXIII). The square structure which enclosed



Figure 6.3 Lower Citadel of Tiryns in LH IIIC-middle. After Kilian 1981a, 155 fig. 1.

destruction and thus was no longer accessible in LH IIIC (Kilian 1981a, 164–6; 1988a, 121–2). The open-air area in front of it to the east, however, retained its cult character (Kilian 1981a, 166–71; Albers 1994, 106). Indeed it was in the same area that the elaborate cult room 117 was built in LH IIIC-early (Kilian 1979, 389–91), then replaced by Rooms 110 and 110a in the following phases, showing continuity throughout the period (Kilian 1978, 460–5; 1981b, 53–6).

Another feature which was preserved in the Lower Citadel from LH IIIB to LH IIIC is Building VI. Part of this building was rebuilt on the top of the earlier foundations after the destruction at the end of LH IIIB2 (Kilian 1983, 279). Although Building VIa did not have

the LH IIIB circular altar in the court in front of the Megaron, has also been supposed to date to LH IIIC on the basis of “two slightly curved cut blocks which were removed in the course of the partial dismantling of the altar and used as building material in the narrow megaron” (cf. Maran 2001, 115, n.15 for all the related bibliography).

The Lower Citadel went through several phases of rebuilding during the LH IIIC period (Fig. 6.3), marked by two main destruction events, one at the end of LH IIIC-early (Kilian 1978, 466; 1980, 186) and another towards the end of LH IIIC-middle (Kilian 1978, 465–6; 1980, 186; 1981a, 154, 193; 1981b, 53–4). Nevertheless, certain features originating in the palatial period were retained throughout all these phases, indicating by their continued use further links with the palatial past. First and foremost, there seems to be continuity in the use of the same cult area as during the LH IIIB period. One of the casemates in the western fortification wall, casemate 7, which probably functioned as a cult place in LH IIIB (Kilian 1979, 394; 1981b, 49–53; 1988a, 142–5), was filled in after the LH IIIB2

exactly the same architectural outline as its predecessor (Building VI), it still preserved the N-S orientation, as well as a similar plan to that of the earlier building, with a row of rooms set on a longitudinal axis, but now adapted to a smaller scale. The most evident difference between the two successive phases of the building is that in LH IIIB it extended to two terraces according to the architectural norm of the palace period (Kilian 1979, 400–1), while the LH IIIC structure was restricted to only one, as were most of the other LH IIIC buildings. Despite the differences, however, this still constitutes the most characteristic case of architectural continuity in the Lower Citadel. It must surely have played a significant role in the settlement both before and after the destruction, possibly in relation to the other preserved feature of the Lower Citadel, namely the cult area. Kilian suggested that Building VI and the cult place comprised a significant traditional complex that was preserved in post-palatial times too (Kilian 1981b, 58; 1982, 400–3; 1983, 304).

Despite the above features of continuity, other evidence points to significant changes in the spatial organization of the settlement. For example, a radical difference can be observed in the architectural plans of the buildings, which no longer follow the layout of the ‘corridor-type’ houses – thus they no longer consist of a series of rooms set on a longitudinal N-S axis, but of small single- or double-roomed spaces. It appears, however, that some of the LH IIIC buildings are more elaborate than others, such as the LH IIIC-early cult room 117, with a row of three columns along its front wall supporting a pediment, the LH IIIC-developed room 115, with its double row of internal columns, and the LH IIIC-developed/advanced room 127, the largest building of the Lower Citadel (Kilian 1980, 177; 1981a, 160).

Another significant change in the LH IIIC spatial organization is the emphasis now placed upon the use of open-air areas or courts. It can be deduced from preliminary reports, that with the construction of the first new buildings in LH IIIC-early, a court (H1) appears to play a central role in the organization of space. When more new structures were built and the occupation of the western part of the Lower Citadel expanded during LH IIIC-middle, two more courts (H2 and H3) were also added to the plan, to the south of court H1 (for a full discussion see Livieratou 2006, 29–30, 71, 331–5).

It should be noted here that although an open-air court stretching along the western circuit wall of the Lower Citadel already existed in LH IIIB, this was not easily accessible from the buildings of the Lower Citadel during this period (Albers 1994, 104–5). In contrast, the LH IIIC buildings had direct access to the courts. This change in interaction between buildings and open-air spaces must also have affected the cult use of the area under casemate 7. Although the area continued to be used for religious practices in LH IIIC, as we saw earlier, the character of the cult must have somehow changed, since access to the area became less restricted than in LH IIIB. The successively built LH IIIC cult-rooms 117, 110 and 110a had direct access to court H1. A number of finds were discovered in the area which underline the cult significance of the court: hypaethral altars to the north of room 117 and to the south of room 110, a large figure with upraised arms and remains of an animal rhyton lying next to the altar outside room 117, and finally twenty-two figurines found in the area to the east and south of this room (Kilian 1978, 460–5; 1981b, 53–6; Albers 1994, 108). The plan of the area led us to suggest that cult activities were now less

strongly connected to the Upper Citadel, and instead involved more the population of the Lower Citadel (Livieratou 2006, 31).

Furthermore, it appears that the function of the other two courts, H2 and H3, in the organization of space in the Lower Citadel was also important. They provided access to the buildings around them, and they were also used in everyday activities, as is clear from the discovery of a refuse deposit buried in a pit in court H2 (Kilian 1979, 386). A hearth was also found in this court, between rooms 126 and 127. Room 126 opened on to court H2 through an entrance in its eastern wall (Kilian 1981a, 154), while room 127 opened on to court H3 (Kilian 1982, 395; 1983, 280–1).

After the destruction that occurred towards the end of LH IIIC-middle, new structures were erected, but interestingly, the feature of open-air courts was preserved. Thus, the new cult room 110a, built on top of its predecessors, and the newly built room 112 (Kilian 1978, 458–61) opened on to court H1, while rooms 106/106a and 124, built on top of the ruins of room 126, had access to court H2. This last complex of rooms served as living quarters, workrooms and storerooms – which, as we have seen, became typical for LH IIIC buildings (Kilian 1979, 385). This was the last phase in which an organized building project was undertaken in the Lower Citadel (Kilian 1979, 385–6; 1981a, 153–4).

The changes in the LH IIIC spatial organization of the Lower Citadel affected the road network too. During LH IIIC the road network was dominated by several irregular roads, which meandered among the buildings of the West terrace leading from one court to another, without following an orthogonal plan (Kilian 1981a, 193; 1982, 395; see *Jahresbericht* 2002, 147–8; 2003, 184; 2004, 272–3 for the most recent discoveries relating to the use of North Gate and the road leading to it during LH IIIC-middle).

The LH IIIC Lower Town (Fig. 6.1)

LH IIIC occupation remains have also been revealed sporadically in several excavated trenches outside the Citadel. The most significant remains have been found in three areas: at the south-eastern foot of the acropolis' hill, to the north-east and to the north-west of the Citadel. At the south-eastern foot, under the eastern gallery, two LH IIIC buildings were built over LH IIIB ruins. One is Megaron W, a large megaron-shaped building with three inner columns along its central longitudinal axis and a hearth paved with sherds and stone plaques between two of the columns. The main period of use of the Megaron W would probably be dated to the end of LH IIIC-middle (Podzuweit 1979, 435; 1988, 223). The other structure, House O, was built to the east of Megaron W. It had only one room and dates to LH IIIC-late (Gercke *et al.* 1975, 10–1; Podzuweit 1979, 435–6).

Another LH IIIC-early complex of rooms was found to the north-west of the Citadel. Interestingly, these rooms were again grouped around a courtyard used for everyday activities, as is evidenced by the discovery of refuse deposits and ashes. Several figurines were found close to the walls or inside the rooms (Kilian 1978, 449–52). More building remains, including rooms and open-air areas paved with plaques or gravel, were found in another area further to the north, some 150m north-west of the Citadel. This complex was

first inhabited in LH IIIB2, at the end of which it was destroyed in a conflagration; it was then reoccupied and went through two more phases of habitation in LH IIIC. Interestingly, here, as in the Citadel, the first phase of LH IIIC appears to have ended in a destruction caused by fire (Dimakopoulou and Valakou 1982, 85).

More building remains of LH IIIC date were recently discovered to the north-east of the Citadel. Here, five settlement phases succeeding each other lasted throughout the twelfth and into the beginning of the eleventh century. Similarities in terms of structure and alignment have been noticed between the remains of these building and those found to the north-west of the Citadel. The familiar arrangement of rooms around a court appears in this area in the second settlement phase, which ended with a conflagration at around 1150 BC. The same spatial organization was preserved here until the end of the LH IIIC occupation. Special mention should be made of one of the buildings standing next to a court: it dates to the second settlement-phase and is one of the largest – so far known – post-palatial buildings. It is also distinctive because of its several rows of columns standing on stone bases. Imports from Cyprus and Crete, and pottery with influences from Naxos, indicate links with these islands. At the end of this phase this building was burnt down and was never rebuilt (Maran 2002, 9–10).

By taking into consideration the buildings found to the north-west of the Citadel and building remains in other areas to the south, Kilian was led to suggest that during LH IIIC the Lower Town was an organized settlement built according to a certain architectural plan. It has been estimated that the area covered in LHIIIC-early was over 24.5 hectares, suggesting that during this period the Lower Town reached its greatest expansion (Kilian 1978, 468–70; 1980, 171–2). This growth in LH IIIC was interpreted by Kilian as the result of a *synoikismos*, which took place when people abandoned many of their settlements in the Argolid at the end of LH IIIB and moved to the area around the Citadel of Tiryns, probably to seek protection and security (Kilian 1978, 468–70; 1980, 172–3; 1988b, 135). Maran has recently suggested that the reason for the expansion of the Lower Town was not only a rise in population, but also – and more likely – a deep change in the social structure of the site. He has argued that a new upper class, emerging after the collapse of the palaces, rejected the acropolis as a site for habitation, choosing instead to settle outside and around it (Maran 2002, 11).

Although some parts of the Lower Town appear to decline in use from LH IIIC-developed onwards (Podzuweit 1979, 435–6), substantial building activity continued in other areas. In particular, the important complex Megaron W was built to the south-east of the Citadel during LH IIIC-developed.

Decline

The first signs of decline in the Lower Citadel started to become evident during LH IIIC-late, following the series of destructions that occurred at the end of LH IIIC-early and LH IIIC-middle. At this stage, there is a tendency to erect single-room buildings which do not appear to share a similar plan and point to the abandonment of the previous settlement

organization at Tiryns (Kilian 1980, 186). This phenomenon was followed by gradual reduction of building activity, suggesting that the population decreased in LH IIIC-late. The abandonment of the Citadel for habitation brought this process to an end (Kilian 1981a, 193). A destruction layer spread over the Late Mycenaean settlement in almost all areas of the Lower Citadel. This layer, named Horizon 22, consists of a 20cm-high, grey deposit and indicates that no building activity was undertaken for a period of time, until it was resumed in the EIA (Kilian 1978, 458).

Although habitation of the area to the north-east continued until the end of the twelfth century BC, the extent of the outer settlement appears to have been gradually reduced towards the end of the LBA. The LH IIIC-late remains are limited to the small, one-room House O to the south-east of the Citadel and to stray finds in the areas to the west and to the north-west (Podzuweit 1988, 223).

Discussion

To sum up, revival and expansion appear to mark much of the LH IIIC period in Tiryns. After extensive levelling of ruins, rebuilding operations were undertaken in the Lower Citadel according to a new, general plan of spatial organization. New buildings of smaller size and simpler plan were gradually built up around open-air courts which apparently played a significant role in the inhabitants' life, while the road network also changed accordingly. In spite of the new spatial arrangement, certain traditional features were revered and retained, such as the area of the cult place and Building VI. The construction of Building T on the Upper Citadel also suggests the wish of the LH IIIC population to respect and re-use a certain feature with, apparently, important symbolic significance. At the same time the Lower Town was expanding on the basis of a new, organized plan of commonly orientated buildings grouped around central courts.

The LH IIIC archaeological evidence from Tiryns reveals a well-planned settlement of considerable size, estimated at over 24.5 hectares. The common orientation of the buildings in the Lower Town, as well as the element of open-air courts that appears both within and outside the Citadel, point to common planning decisions by the community. The whole undertaking of levelling the ruins and rebuilding the settlement according to a new plan implies the presence of a ruling authority in charge of the planning and its execution. Moreover, the construction of Building T over part of the Great Megaron with the intention of incorporating the old throne-place perhaps indicates, as already noted, the existence of one main ruling figure drawing upon ancestral symbolism to strengthen his power and position. Other evidence also points to a high degree of social complexity, such as the exceptional buildings that appeared in the Lower Citadel and Lower Town during LH IIIC – *i.e.* the building with the internal rows of columns in the north-eastern sector, Megaron W to the south-east of the Citadel and room 115 with its double row of columns in the Lower Citadel. According to Maran, the very expansion of the Lower Town in LH IIIC-early has been attributed to the rise of a new social class, which chose to articulate its different social role by moving and settling intentionally outside the Citadel (Maran 2002, 11; 2006). Moreover, “the elongated hall” of Building T in the Upper Citadel “may now have given the ruler the

possibility to demonstrate and to advertise his prowess through feasts and gatherings” (Maran 2001, 118). Finally, a glimpse of the trading activities of this emerging social group is gained through the imports from Cyprus and Crete found in the building with the internal rows of columns in the north-eastern sector (Maran 2005, 420–5).

Features such as those found in LH IIIC Tiryns, *e.g.* substantial settlement size (possibly resulting from nucleation of formerly dispersed habitation units), commonly organized spatial arrangement, social hierarchy resulting in complex political organization, and a concentration of economic activities such as trade or craftsmanship, are usually regarded as the basic characteristics of an urban centre (Schallin 1997, 19–21: based on Grove 1972, Smith 1972 and Trigger 1972; cf. also Wheatley 1972). However, a sharp contrast between urban and rural life, such as that in first century BC Rome, or even in fifth and fourth century Athens, where “grain imports from overseas were needed every year to sustain the population” (Morris 1991, 34–5), cannot at present be seen in the Argolid during LH IIIC. Indeed, results of surveys suggest a gradual drop in the number of sites found in the Argolic countryside. One might take into consideration the results of the survey in the Berbati-Limnes area (Schallin 1996, 173) and in the southern Argolid (Runnels and van Andel 1987, 316; Jameson *et al.* 1994, 371), as well as the general drop in the number of sites in the LH IIIC Argolic plain observed by Hope Simpson (1981). On the other hand, the features of the organized and, in its own context, quite extensive settlement, the activities of trade and craftsmanship, the social hierarchy and political organization could be considered to differentiate LH IIIC Tiryns from a large village of that period.

Early Iron Age Tiryns (Fig. 6.4)

The next question to address is whether and how this ‘urbanized’ character of LH IIIC Tiryns affected its EIA history. As already noted, a decrease of population and abandonment of the settlement organization was observed in the Lower Citadel from LH IIIC-late. This phase could represent a slow, gradual dissolution of the centre, with the settlement declining into a simpler form of habitation. At the end of LH IIIC, the Lower Citadel was abandoned for a short time, but was soon reoccupied in the Sub-Mycenaean (‘SM’) period (*c.* 1070–1020 BC), as indicated by SM layers clearly distinguished from the earlier layers by Horizon 22 (the grey layer of abandonment). Stray SM finds have been discovered inside the Citadel (Papadimitriou 1988, 242, fig. 6; 1998, 119). The area outside the Citadel was also inhabited in the SM period: pottery of this period was found in two areas, one to the west of the Upper Citadel (site Stadt-West: L50–LI57) and another to the south (Papadimitriou 1998, 119). Eight SM graves – pits and cists – have been discovered at three different sites to the south and south-east of the Citadel (Verdelis 1963, 6–24; Müller and Oelmann 1912, 128, 138, pl. 16:8; Gercke-Naumann 1974, 16–17; Gercke *et al.* 1975, 11; Papadimitriou 1998, 119, fig. 1b).

During the Protogeometric (‘PG’) period (*c.* 1020–900 BC), Tiryns continued to be inhabited. No clear PG layer has been preserved inside the Citadel, but pottery has been found in various parts of it (Papadimitriou 1988, 240–2; 1998, 120). Outside the Citadel, however, the finds are more substantial. PG evidence comes from three sites. First, to the

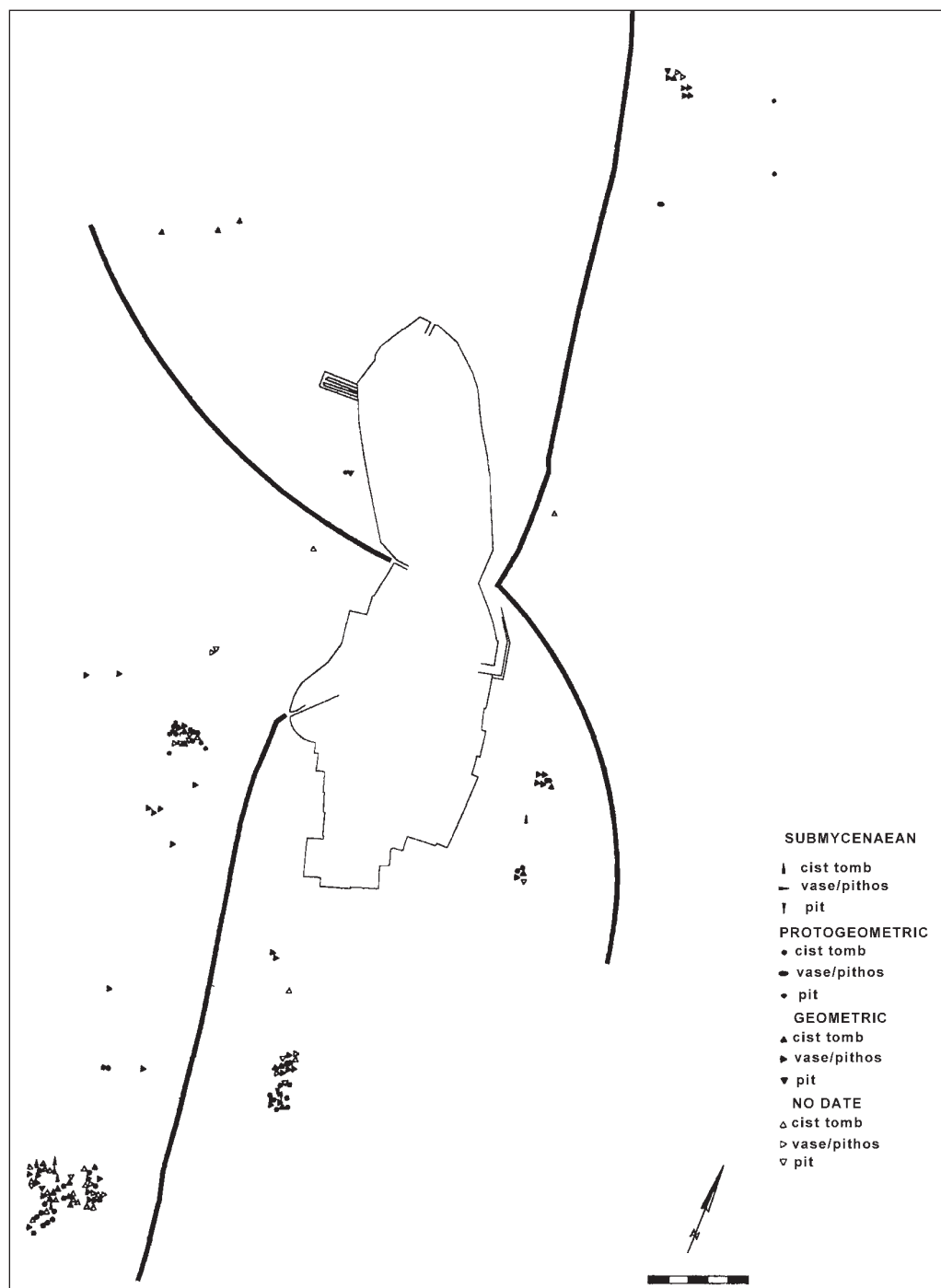


Figure 6.4 Early Iron Age Tiryns. Adapted from Papadimitriou 2003, 715 fig. 1.

west of the Upper Citadel remains of houses have been discovered; these were destroyed by fire in Late PG (Gercke-Naumann 1974, 22; Hägg 1974, 82; Papadimitriou 1998, 120; Lemos 2002, 159–60). Recently-resumed excavations in the same area have brought more PG remains to light (Jahresbericht 2006, 80–1; Jahresbericht 2007, 104). To the west of the Lower Citadel was an Early PG apsidal building with earth foundations and mudbrick walls. A layer containing Late PG pottery was later deposited over its destruction level (Kilian 1988a, 106–8; Papadimitriou 1998, 120; 2003, 718–20). Building remains and Early PG pottery have also been found to the south of the Citadel (Papadimitriou 1998, 120).

In addition, mortuary evidence comes from seven locations around the Citadel: some forty PG tombs have been published, mostly cist tombs, with some pits and a few pithos burials. The tombs contain single, or occasionally double burials. Two of the main burial sites, namely the so-called south-west cemetery (Müller and Oelmann 1912, 127–64; Hägg 1974, 82; Papadimitriou 2003, 720 n.35) and the cemetery under the modern prison (Verdelis 1963, 6–24; Hägg 1974, 82–3; Papadimitriou 2003, 721 n.37), were already used for burial practices in the SM period. Another important group of graves is situated at a site west of the Upper Citadel (Gercke-Naumann 1974, 23–4; Hägg 1974, 82–4; Aupert 1975, 613; Papadimitriou 2003, 722).

The practice of burying the dead close to houses has been observed at Tiryns in a few cases (as, for example, at the location west of the Upper Citadel: Papadimitriou 2003, 720). The close connection between habitation and burial grounds, and their dispersal outside the Citadel, give the impression of small groups of EIA inhabitants living at some distance from each other, and burying their dead close to their houses. The pattern of the distribution of EIA tombs around the Citadel has actually led to the suggestion that several small groups of inhabitants chose to live and be buried next to four specific roads leading from Tiryns towards the neighbouring sites of Argos, Nauplion, Asine and Mycenae (Papadimitriou 2003, 725). We can see these groups as small population units living on agriculture and preserving their internal unity on the basis of family or kinship ties (Lemos 2002, 200, 220).

It is also interesting to note that there might have been some kind of social and/or cultural differentiation among these groups, indicated by the differences in burial offerings. For example, the tombs in the south-west cemetery were not very rich in offerings (Papadimitriou 2003, 720–1), while the burials in the cemetery found under the modern prison were quite rich in metal objects, including mostly bronze offerings and a few gold ornaments (Papadimitriou 2003, 721–2). Special mention should be made of one of these tombs, a pit containing an Early PG double burial of a man and probably a woman, accompanied by a spearhead, a shield-boss and a helmet, all made of bronze, as well as an iron dagger (Lemos 2002, 160). Most of the burials in the cemetery to the west of the Upper Citadel were also very rich in pottery and metal offerings (Papadimitriou 2003, 722).

The same picture of dispersed habitation units seems to continue into the subsequent Geometric period. The Citadel was still inhabited, as Geometric pottery has been found in several parts, including some of the casemates (Hägg 1974, 84; Jantzen 1975, 99; Kilian 1982, 427, 429). Remains of rectangular buildings have been excavated (Kilian 1978, 458), and there is also evidence that the Citadel was used for burials (Hägg 1974, 85) and for

cult purposes. A deposit (bothros) containing votives dated from the mid-eighth to the mid-seventh centuries was found 22m to the east of the Megaron on the Upper Citadel. This discovery sparked a long scholarly discussion on the dating of Building T, which has at times been considered to be a Late Geometric/Early Archaic temple. In spite of the recent confirmation of a LH IIIC date for Building T, there is no doubt that a cult, most probably of Hera, was practised in the area in the Late Geometric and Archaic periods (for the discussion on dating of Building T and the possible cult of Hera cf. Foley 1988, 145–7 and Mazarakis Ainian 1997, 159–61; for attribution of the cult to Athena cf. Verdelis *et al.* 1975, esp. 199–201). As for the Geometric occupation outside the Citadel, this seems to have continued in those areas that were already inhabited in the SM and PG periods and also to have expanded to the area to the north, where tombs and settlement remains of the period have been discovered (Hägg 1974, 85; Kilian 1978, 467–8; Chatzipoulou 1980, 123–5; Dimakopoulou and Valakou 1982, 85). The recent discovery of Late Geometric pottery kilns to the north-east of the Citadel (Maran 2000, 640) suggests that workshop activities were located in this area.

At some point, most probably in the course of the Archaic period, the dispersed settlement units of Tiryns must somehow have come together and formed one political entity. The archaeological evidence from this period is, unfortunately, scanty, consisting of sparse settlement traces and a few burials of the early seventh century BC (Jantzen 1975, 106; Kilian 1983, 278–9; Foley 1988, 51; Hall 1997, 100). Nevertheless, numerous votive offerings found all over the area, as well as the third remodelling of the altar in the Great Court, possibly dating to the Archaic Period, one Doric capital and a few roof tiles from the Upper Citadel, confirm the continuation of cult practices in the Archaic period and later (Jantzen 1975, 102–6; Mazarakis Ainian 1997, 161). In addition, poros fragments found in a trench dug to the west of the Lower Citadel for defensive purposes probably in Hellenistic times, are thought to have originally belonged to an Archaic cult complex consisting of a prostyle temple and other buildings (Schwandner 1988, 283; Polczyk 2005, 135–7). The evidence for cult activities was also recently enriched by the discovery of an Archaic cult deposit to the north-east of the Citadel. The deposit contained miniature vases, animal figurines and bronze offerings (Jahresbericht 2000, 574; Jahresbericht 2001, 640). Evidence of socio-political organization at Tiryns by the end of the seventh century BC comes from the ‘sacral law’ that was inscribed on the outer surface of the covering plaques of one of the two *syringes* running across the western wall of the Lower Citadel. The ‘sacral law’ referred to a *damos* in charge of deciding the meeting place for a public assembly, an *aliaia*, as well as to a number of magistrates and officials (Verdelis *et al.* 1975, esp. 195–9, 201–3; Hall 1997, 92; Polczyk 2005, 137–9).

Although forming a political unity of some sort that must have been perceived as a *polis* by its contemporaries – as indicated by the appearance of the name of Tiryns alongside *poleis* such as Athens, Corinth and Eretria in inscriptions on the Serpent Column at Delphi and on a statue base in Olympia, celebrating victory over the Persians (Hdt. 9.28.31 and Paus. 5.23.2 – cf. Hall 1997, 93; Piérart 2004, 614–5) – it is far from clear whether the Archaic settlement of Tiryns should be considered an urban centre. This is mostly due to

the scant archaeological evidence. Nevertheless, as Hall has rightly pointed out, the social complexity reflected in the 'sacral law' most probably allows us to infer a large population. In order to explain its archaeological 'invisibility', Hall goes on to assume that "settlement patterns at Tiryns had become more dispersed, with occupation expanding into areas of the plain which remain relatively unexplored" (Hall 1997, 100). Although this reconstruction is based on negative evidence, and the 'invisibility' of Archaic Tiryns might instead be due to the lack, or fragmentary nature of publications, as well as to severe soil erosion outside the Citadel (Jahresbericht 2000, 574) and its later use as a Hellenistic fort, any reconstructions of a well organized, urban settlement would probably be far-fetched.

Thus we may conclude that after the dissolution of the 'urban' character of Tiryns towards the end of LH IIIC, the settlement never again reached such a stage of 'urbanization'. It is possible that some degree of social hierarchy was inherited in the EIA from those times, as may be reflected in differences of wealth in the burial offerings of the PG population groups. In addition, special status was apparently ascribed to certain people, as indicated by the Early PG warrior burial. The population size, however, was apparently still small enough to allow the inhabitants of Tiryns to live in dispersed groups, certainly with some interaction with each other, but without the degree of social complexity that would necessitate the formation of an overarching political authority. The increase of population and settlement expansion noticed in the Geometric period, although not of a very high degree, must have led gradually to a certain level of social complexity which generated the formation of a political unity, ruled, as we see in the Archaic records, by appointed authorities. Still, however, the sparse remains do not allow us to use the term urban for the settlement which existed until its destruction by Argos after the Persian wars.

Koukounaries

LH IIIC Koukounaries (Fig. 6.5)

The little information published of the excavations at Koukounaries – mostly in preliminary reports – reveals a settlement of some importance in the last phase of the LBA, in LH IIIC. The settlement, built on the summit of a hill on the south-west side of Naoussa Bay on Paros, is on a plateau some 26m by 33m in size. It is surrounded by rock formations except on the south side, which has a sloping descent. Preliminary reports of pottery found in the storage rooms of the site indicate that the settlement was founded in the LH IIIC middle-developed phase (Koehl 1984; Schilardi 1984). The main plan of the area reveals two intersecting corridors running west-east and north-south, leading to a series of rooms. In the southern limits of the settlement there is an impressive fortification wall 1.66m wide, with a preserved height of 3m and a length exceeding 16.5m (Schilardi 1978, 290). The main gate is on the west side, where a courtyard area led into an open portico facing west. From the portico a flight of stairs to the south ascended to the upper storey, while a door to the east gave onto a corridor leading to basement rooms (Schilardi 1984, 200). To the north remains of a tower indicate the existence of another gate in this area (Schilardi 1984, 188).

Most of our information for the site comes from the material found in the three storage

rooms located directly behind the fortification wall. It has been suggested that these were the basement cellars of the settlement. They contained numerous storage pithoi and over 400 vessels in one of the storerooms (Schilardi 1984, 188 and 192–5) and 150 in another (Koehl 1984). The third storeroom, which remains unpublished, also appears to have contained numerous fine ware vessels (Schilardi 1984, 190). Other finds included bronze arrowheads, a bronze double axe, spears, razors, a ladle, crushed lead vessels, steatite beads, conical dress weights, spindle whorls, obsidian blades, one ivory comb and pins, whetstones, and unworked fragments of crystal and deer antlers.

At the south end of the north-south corridor is a room measuring 3.9m by 2.95m with its northern wall 0.9m thick. Amongst the burnt debris found in the room, which was believed to be part of a building with two storeys, was an ivory relief fragment with a spiral decoration, suggested to be from an arm-rest of a throne. This find led the excavator to identify this room as the “administrative room of the high magistrate” (Schilardi 1984, 188). The contents of the three storage rooms suggest a wealth of goods unparalleled in many other settlements of this period. The fact that the settlement is not of substantial size

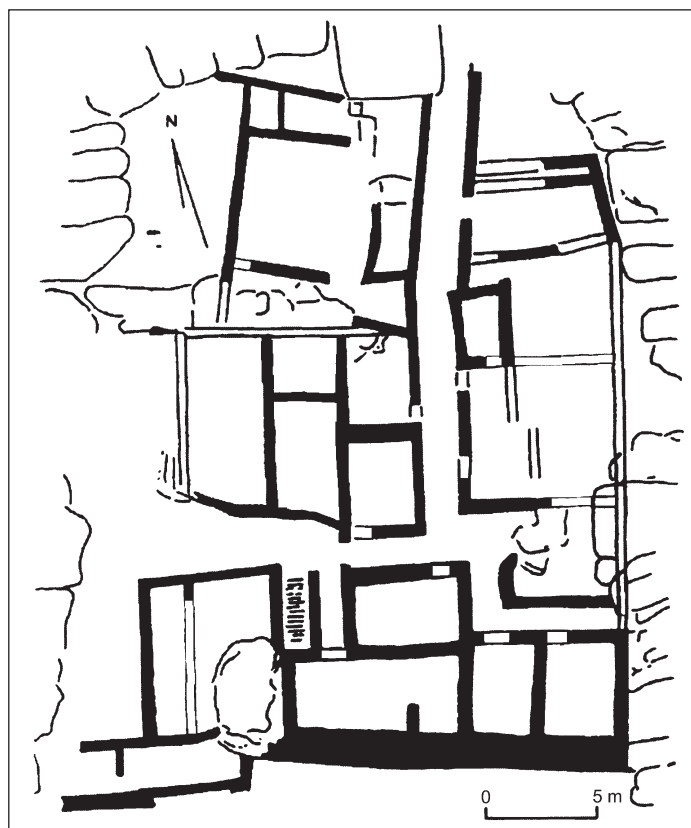


Figure 6.5. Koukounaries: The LH IIIc complex. After Schallin 1993, fig. 36.

supports the excavator's suggestion that the remains could have belonged to a "mansion" or a "small provincial palace" (Schilardi 1992, 630).

At some point during LH IIIC middle the site suffered a severe destruction. The number of human and animal skeletons found in various places, as well as the great number of vessels and valuable items found *in situ* in the storerooms, indicate a violent destruction with little opportunity for looting (Schilardi 1992, 631). Some time after this destruction, walls were built across corridors and rooms of the original complex. Schilardi dated these walls to the advanced phase of LH IIIC-middle and suggested that the people who inhabited the hill during this time were probably squatters (Schilardi 1984, 203–4). The only evidence for this hypothesis is the fact that the rich finds from the storage rooms were not removed by the later occupants, which suggests that they were not aware of the contents of these rooms.

EIA Koukounaries (Fig. 6.6)

Publications of the EIA material found in the area are less clear. One SM lekythos is the only published evidence which indicates some activity on the Upper Plateau during this period (Schilardi 1990, 41, Fig. 6.6 and Mazarakis Ainian 1997, 82). More promising is the Late PG period, when Building A, an apsidal or oval construction 12m in length and 7m in width, was built in the south-west area of the hill (Schilardi 1979, 236–48; 1980, 284–5; 1981, 288–92; Mazarakis Ainian 1997, 82–3 and fig. 322; Lemos 2002, 147). According to Schilardi "the prosperity of the PG settlement was followed by a period of decline, as suggested by the paucity of finds"; there is little evidence of the Early Geometric and Middle Geometric periods (Schilardi 1983, 175). East of Building A were found the remains of the rectangular Building C, measuring *c.* 13.7m by 6m. It was constructed in the middle or towards the end of the eighth century and continued to be used until early in the seventh century (Schilardi 1978, 205; 1983, 177–8; Mazarakis Ainian 1997, 184). Schilardi had originally suggested that Buildings A and C were either temples or the dwellings of the local ruler (Schilardi 1978, 210; 1979, 247–8). Mazarakis Ainian agrees that these were the houses of local rulers but he argues against the interpretation of a religious function for these buildings since no votives have been found in them. He also points out that there is another building at the south-east slope which has apparently been identified as a temple (see below; Mazarakis Ainian 1997, 183–4).

The layout of the settlement on the Upper Plateau during the LG period consisted of independent units built along a north-south orientation and divided by narrow streets. Alongside the large Building C, described above, were at least three others: one measuring *c.* 8.5m in length and divided into two rooms, another *c.* 12m long and containing, amongst other installations, a platform and a bench, and finally, in the northern part of the plateau, a room measuring *c.* 6.6m by 5.2m which was part of a larger complex extending to the east (Schilardi 1983, 177–8). All these Geometric structures led Schilardi to describe the upper plateau layout as an example of "town planning", even if slightly "crude" (Schilardi 1983, 180).

On the south-east slope was the temple of Athena (Schilardi 1988; Mazarakis Ainian 1997, 185–8 for summaries). It consisted of a large rectangular room measuring 9.5m by *c.* 6.4m

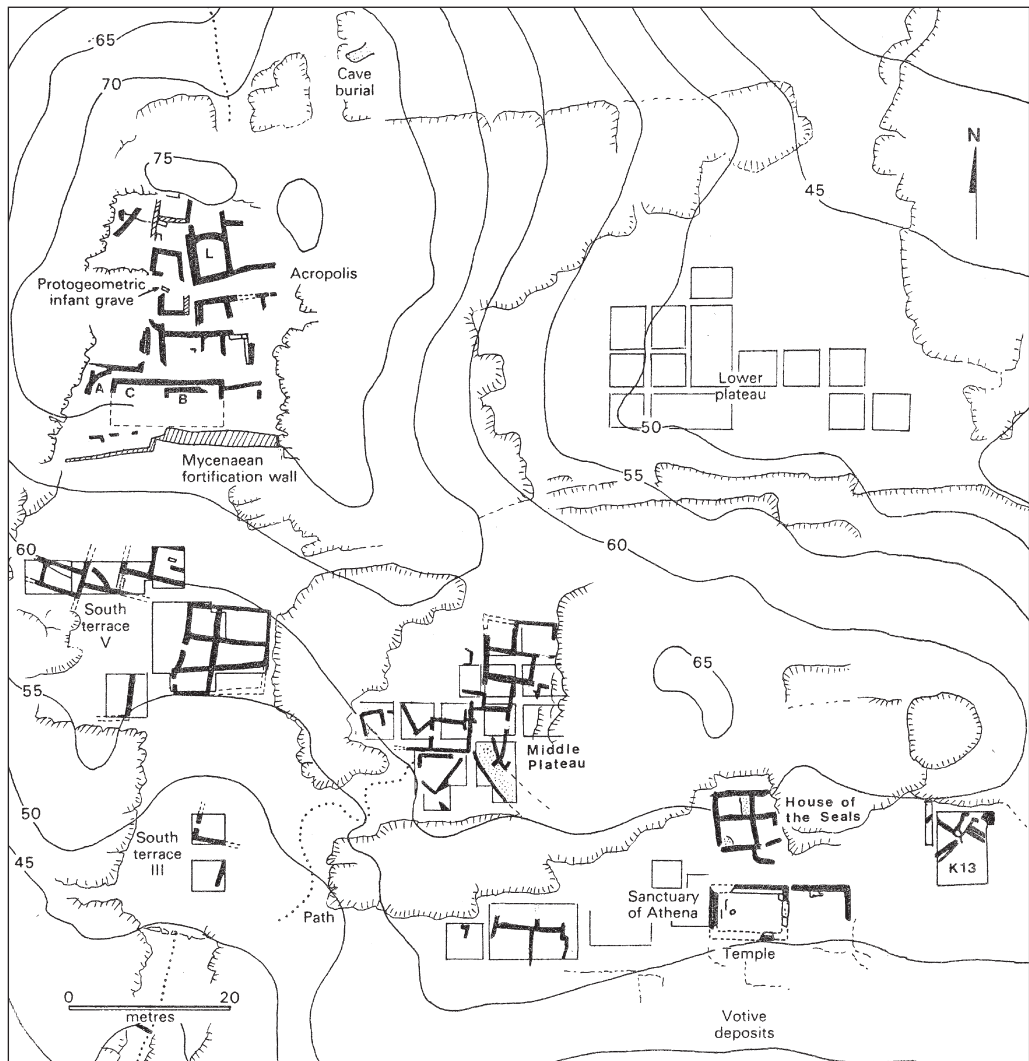


Figure 6.6 General plan of Early Iron Age Koukounaries. After Mazarakis Ainian 1997, fig. 320.

(Schilardi 1984b, 295–7; Mazarakis Ainian 1997, 185). Installations at the temple included a bin-like structure in the centre of the *cella*, possibly an offering table. A post-Geometric platform found to the east of the temple was possibly an altar; this had a semicircular stone structure below it, which could have served as an earlier altar (Schilardi 1986, 193). North of the temple is the so-called ‘House of Seals’, which might have been the Prytaneion (Mazarakis Ainian 1997, 186). The date of the temple is still not very clear, although pottery associated with the west retaining wall of the structure, which appears to be later than the rest of the temple, provides a date of *c.* 700 BC (Mazarakis Ainian 1997, 186–7), thus giving a possible

construction date of the first half or the middle of the seventh century. However, numerous stratigraphically preserved layers of the late LH IIIC, PG, Sub-PG, Middle Geometric, Late Geometric, Early Archaic, Archaic and Classical periods were observed in the *temenos* area (Schilardi 1988, 45 and 47 fn. 66; Mazarakis Ainian 1997, 187). It should also be noted that around the same time, a series of grouped houses (*insulae*) were built along the south ascent and the middle plateau. According to the excavator, “the Archaic community was distinguished by a new, more orderly planning represented by residential areas which surrounded a central open space” (Schilardi 2002, 231).

Based on the above evidence the history of the site can be summarised as follows. At the very beginning of the LH IIIC middle-developed phase, the settlement on the Upper Plateau was founded. Buildings of this period were part of the area known as the ‘mansion’, which included a fortification wall and the three storage rooms described above. Perhaps some cultic activities took place in the area of the later Temple during LH IIIC but little information is available. Evidence on the Upper Plateau for the SM, Early PG, and Middle PG periods is thin. At some time at the beginning of the ninth century, during the Late PG period, the apsidal Building A was constructed on the Upper Plateau, and it continued to be in use until the middle of the eighth century. In the first quarter of the eighth century, Building B was built; it was then replaced by Building C by the middle or the end of the eighth century. At the same time a number of large buildings were also constructed on the Upper Plateau. Shortly after 700, the Upper Plateau was abandoned with the exception of Building C. It appears that roughly at the same time the population moved to the lower terraces since a series of houses were built there. Finally, early in the seventh century Building C was abandoned, as were the lower plateaus and terraces, with the exception of the Temple and the House of Seals.

Discussion

It is important to point out that Koukounaries was founded in the LH IIIC period. The discovery of the LH IIIC storage rooms with their rich finds, indicating a wealth of goods, is unparalleled in many other contemporary settlements. The inhabitants were most probably refugees from the mainland or elsewhere. The settlement is not of a substantial size, thus one is tempted to follow the excavator’s suggestion that the site could have been a ‘mansion’ or a ‘small provincial palace’. The reason for the destruction of the site in LH IIIC-middle is unknown. It is of course possible that the fortifications at Koukounaries were indeed built to protect (albeit unsuccessfully) its inhabitants and not as a prestige symbol. As mentioned above, the evidence suggests that there was a violent destruction with little opportunity for looting. The fact that rebuilding occurred above these destruction levels, often closing off earlier rooms and corridors, and that areas such as the storage rooms in the south were left undisturbed, all suggest that later settlers were unfamiliar with the complex in its earlier form and, as Schilardi suggests, were indeed ‘squatters’.

Koukounaries’ location perhaps made it an ideal place to found a new settlement following the upheavals of LH IIIB. The selection of this high plateau, the ascent to which is very difficult, indicates the clear intention of its inhabitants to choose a strategic location which was difficult

to infiltrate and which provided a clear view of the harbour below (Thomatos 2006, 217). Whoever the original inhabitants of the site were, they did not return after the destruction in LH IIIC-middle. Much later, in the ninth century, the locale once again has substantial evidence for continuing use until the seventh century when it was abandoned.

Conclusions

What can we learn from these two examples, examined briefly above, during the period which followed the end of the palatial era and preceded developments that eventually led to the Archaic city-states? It is clear that neither of them developed into an urban centre, or into a *polis* in the traditional sense. It is also clear that in both sites we have evidence of elite groups which were in control after the collapse of the palatial rule and which were taking important decisions affecting their kin and their communities. At Tiryns, for example, such a group took the decision to restore the Wanax-ideology but also to move outside the Citadel (Maran 2001). Important changes can be seen in the organization of space for both cult and secular functions inside and outside the Citadel. The notion of the open courts is also completely different from the past arrangement of the use of space, indicating perhaps greater inclusivity and communality among the LH IIIC inhabitants. On the other hand, at Koukounaries, the discovery of luxurious items associated with LBA elites and the construction of the fortifications reveal the presence of another group operating with different agendas and priorities.

We may conclude that the LH IIIC community at Koukounaries was not only unfortunate in being violently destroyed at an early stage in its history – it also may have taken a wrong decision in establishing a settlement in an isolated site (albeit well protected) without access to the resources which could have guaranteed its future. Perhaps this was also the reason that this site, as with those of Oikonomou, Kargadoura, Filizi, Sarakinika and Livadera on Paros, was deserted without violence during the seventh century BC (Schilardi 1983, 182). In fact, Paroikia is the only settlement that flourished in the following periods and formed the *polis* of the island of Paros. As Reger notes, “it is far from clear why that site won out over the others” (Reger 1997, 464). Perhaps on Paros, as on many other islands of the period, the *polis* “came into existence as the consequence of a *synoikismos*” (Reger 1997, 468) and, as in the Argolid (see below), local conditions did not favour the existence of more than one ‘urban’ centre.

On the other hand, it is interesting to follow the fate of Tiryns: although it was of ‘urban’ fabric, and entered a path of social, economic and political development that could, in theory, lead to urbanization, it never fully reached this stage after LH IIIC. After the abandonment of the site which, as we have seen, is marked in the archaeological record with Horizon 22, the ‘urban’ features which were in development during LH IIIC were also abandoned and replaced by small-scale communities organized in several clusters of houses and their cemeteries around the Citadel. Interestingly, it is Argos which would be gradually urbanized in the Argolid (Hägg 1974, 45; Foley 1988, 27), and perhaps it was because of Argos that it was not possible to have another urban centre in this area. The destruction of Asine by

the Argives at around 700 BC (Paus. II.36.4–5) might have prevented any other group in the area from developing into an ‘urban’ centre. And if the Tirynthians could still decide, against Argos’ wishes, to fight the Persians on the side of Mycenae and Athens at Plataiai in 479 BC (Hdt. 9.28.4 and 31.3; Paus. 5.23.2), this was only a short ‘rise’, probably achieved only thanks to the recent defeat of the Argives by the Spartans at Sepeia, in the land, in fact, of Tiryns itself (dated to *c.* 494 BC: Hdt. 6.75–83 – cf. Piérart 2004, 615). That attempt was soon followed by Argos’ revenge (Hdt. 6.83.1–2), which ended Tiryns’ course towards urbanization forever (Verdelis *et al.* 1975, 190–2; Foley 1988, 31).

It is thus clear that neither of these sites developed into ‘urban’ centres or classical *poleis* in the traditional way. Nevertheless by tracing their histories in the post-palatial background, we may appreciate better the social and political complexity which the EIA societies seem to have inherited from their LBA past – as this is constantly redefined and expressed in the new cultural terms of each period. Estimating stability or instability of a settlement based on its life-duration or over-reliance on demographic analysis in order to decide which site would become a *polis* may be misleading if it results in the disregarding of local and historical conditions. Instead of such models, we need to have a long-term view of the evidence, transcending the divide between the LBA and the EIA, within its own historical and geographical context.

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7 The ‘Thracian’ Landscape of Archaic Thasos

Sara Owen

Introduction

Studies of the development of urban forms in the Archaic and Classical Greek world have often assumed that Greek cities developed along similar lines wherever they were located. They present the Archaic Greek city as perhaps a smaller scale version of the later Classical one, but not different in essence (Hansen 2006). This view is becoming difficult to sustain. The scattered settlement patterns and peculiarities of some Archaic sites, such as Megara Hyblaea and Thasos, might even threaten to remove them from the classification of urban, rigidly defined (see de Polignac 2005). As a result of the varied evidence now found for this period, scholars are starting to question the rigid criteria that have determined what is to be called urban (see *e.g.* Osborne 2005; cf. Morgan and Coulton 1997). Criteria such as size of population, existence of centralized authority, evidence of established trade and presence of monumental architecture together with legal and other political considerations are often taken as good indicators of urban status (Morgan and Coulton 1997; Horden and Purcell 2000, 93; Sollars 2005, 255. Cf. Childe 1950). Indeed, clear evidence of urban status can be found where these criteria coincide, for example in the case of a Classical city-state such as Athens. However, in the Archaic period, they often do not coincide. It is common in many of our Greek colony sites to have ritual spaces without evidence of a developed urban centre, or evidence of a large population with centralized authority (see *e.g.* Morgan and Coulton 1997).

The criteria for labelling a site urban have been the subject of much debate (see *e.g.* Childe 1950; Weber 1966; Hansen 1997; Osborne 2005; Hansen 2006; Preston and Owen, this volume). But the very act of labelling a site as urban can produce a misleading familiarity and erase and obscure important differences. In many studies the ideal of a Classical Greek or Roman town has been used as a benchmark for urbanism and the urban form is therefore assumed to have a homogeneity that it has never possessed (Banning 1997, 283; cf. Childe 1950). Osborne’s 2005 article has gone a long way towards addressing this problem. He suggests that rather than look for a list of criteria in the archaeological record, we should use the “lowest common denominator” of urbanism as “a process of population concentration” (Osborne 2005, 8 quoting Tisdale 1942) and ask “what social, political or economic functions required, encouraged, or at least allowed, people to come back together

in relatively dense and relatively large communities?” (Osborne 2005, 8). Such an approach has the merits of allowing archaeologists to explore and embrace diversity in the material record, and to attempt to understand this social process within particular social contexts. This mode of study also allows us to explore the social processes underlying nucleations of populations in areas not conventionally viewed as urbanized.

While it is true that the urban form was not homogeneous, however, we should be careful of expanding the criteria for the wrong reasons: for example due to general unease with the idea that some Archaic Greek colonies were not urban foundations. Whilst the move away from rigid criteria to the idea that “urbanization is a phenomenon which admits of degrees” (Osborne 2005, 7) is to be welcomed, we need to guard against the assumption that all Archaic Greek colonies were necessarily centred upon an urban community from the start.

One of the key problems in the discussion is that the idea of urbanism is inextricably linked with civilization – in concept and in etymology. The linking of urbanism with the idea of sophistication is not new. The Latin roots of the words ‘urbane’ and ‘civilized’ for example, are inextricably connected the idea of town dwelling. This (for us, natural) association has also had a particularly detrimental effect on the study of urbanism outside the immediate Classical context, and particularly within the study of ‘Greek colonization’. In the context of ‘Greek colonization’, the settlements of the local populations can sometimes display similar levels of development to the Early Archaic traces in Greek colonies nearby (ritual space, clusters of houses, craft specialization, fortification). In the ‘Thracian’ sphere, examples of such may be found at Braniza and Ovcharovo (Gotzev 1997), and possibly also at the site of Hagios Georgios near Maroneia, which has been associated by some with the Homeric Ismaros (Triandaphyllos 1991). As I will argue below, pre-colonization Thasos Limenas might also show signs of these traits. However, these are rarely seen as possible precursors to urban development. Similarly scattered evidence from Archaic Greek colonies such as Thasos Limenas is, however, generally viewed as urban, or evidence of imminent urbanization (Grandjean 1988; de Polignac 2005). This is partly due to the later history of the site – that is, the fact that what we would recognize as a Greek city eventually emerges here. The argument is therefore teleological. But this general perspective perhaps also arises from the local populations not being viewed as civilized (in its moral meaning). Any later urban development that occurs within these Early Iron Age settlements is often put down solely to the influence of the ‘Greeks’.

In this article, I wish to look in detail at one particular Greek colony: Thasos. This is partly because the site has been so central to the recent breaking down of the idea of the ideal Greek Archaic town (see Martin 1978; Grandjean 1988; Blondé *et al.* 2002; de Polignac 2005), but also because my own research in this area has concentrated upon the local population. The combination of these two perspectives, I believe, highlights the shortcomings of traditional views of the development of Greek cities ‘abroad’.

In discussing the patterns here, it becomes inevitable that the labels ‘Thracian’ and ‘Greek’ are used as shorthand for the material culture assemblages encountered. These are not to be viewed as monolithic and utterly separate groups, but as analytical classifications. My

concern here has been to outline continuity and integration in the lived landscape in a period conventionally portrayed as forming a break with the past.

Thasos

Recent work on Thasos has proceeded on two main (and separate) fronts. The first and most prominent has been the impressive work carried out, primarily by the French School, on the site of the Greek colony of Thasos Limenas, which was settled by Parian 'Greeks' in the mid-seventh century BC (according to Graham's chronology, which I follow: Graham 1978; Owen 2000a; 2003; 2005). This work has succeeded in tracing the layout and development of the Greek town and investigated in detail the sanctuaries, *agora*, acropolis and houses. Two deep sondages have found evidence of immediately pre-colonization Thracian activity (Bernard 1964; Graham 1978; Kohl *et al.* 2002). One of these uncovered a rich sequence of levels which included an apsidal or ellipsoidal structure and levels associated with the activities of an iron forge (Kohl *et al.* 2002). There is little knowledge so far of the Archaic cemeteries. A few Archaic graves have been found under the foundations of the south-west part of the fortification wall (Koukouli-Chrysanthaki *et al.* 1996, 769–70; Sgourou 2002, 1–2) and a few scraps of cremated human bone discovered near the Glaukos *mnema* give a tantalizing indication of the possible extent of these cemeteries (Blondé *et al.* 1994, 460; 2002, 260). The Classical burials found seemed to indicate a prosperous city within the Greek cultural ambit. Interestingly, however, the physical evidence from these Classical skeletons indicates that males had greatly developed muscular development in the lower leg and feet, of a type that has only elsewhere been found in the osteological evidence from the Early Iron Age 'Thracian' community at Kastri (Agelarakis 2002). This has led Agelarakis to suggest "the possibility of 'gene flow' processes between the local Thasian population and the Parian colonists" (Agelarakis 2002, 18). Epigraphical study has drawn attention to the phenomenon, in the Classical period, of mixed 'Thracian' and 'Greek' names. The question of whether or not this indicates intermarriage has occasioned a lively debate (see Graham 1978, 92–4 for a thorough discussion of the evidence; cf. Pouilloux 1954, 311–3; Samsaris 1984).

The other front has been the study of the Thracian Early Iron Age – 'Thasos before the Greeks'. This has involved the excavation of a large cemetery, and parts of a settlement, at the site of Kastri, and a cemetery at the site of Larnaki by Koukouli-Chrysanthaki, resulting in an impressive and thorough publication (Koukouli-Chrysanthaki 1996). This large set of burial data has given an unparalleled opportunity to investigate social changes in Early Iron Age Thasos, and I have argued elsewhere that the patterns indicate the rise of an elite in the late eighth century BC, a hypothesis that conforms well to the patterns visible on the 'Thracian' mainland (Owen 2000a; 2006; forthcoming). Several other Early Iron Age sites have also been identified in the mountainous interior of the island, but so far only short reports of them have appeared (see *e.g.* Papadopoulos and Behtsi 2003; cf. Koukouli-Chrysanthaki 1996). What we know of these settlements seems to indicate that a complex settlement system, involving several small settlements, cemeteries, ritual sites (including a ritual cave and a possible pit sanctuary) and perhaps even a refuge site, had developed in the

mountainous interior of the island by the ninth century BC (Owen forthcoming; Lucas *et al.* forthcoming).

These two areas of intensive research have produced exciting results. However, the material has not yet been linked together. Pouilloux (1954; 1964) argued for friendly relations between ‘Greeks’ and ‘Thracians’, but that is now far from the accepted view. The investigation of Early Iron Age Thasos has, in fact, produced results that have influenced the Classical scholars in the other direction. For instance, the fact that Kastri is abandoned just prior to Greek settlement has been put down to a violent capture of the island by the Parians (Bernard 1964; Koukouli-Chrysanthaki 1996). I think that the archaeological evidence in fact tells a different story.

The Archaic development of Thasos town

As de Polignac has suggested, a certain amount of uniformity has been assumed in Archaic Greek urbanism, partly due to the persistent presence of the circuit walls in archaeological plans – and the focus upon of a division between ‘exterior’ and ‘urban’ space (de Polignac 2005, 45). As he rightly points out, “if one suppresses the representation of circuit walls in those cases where their existence is not formally attested, Archaic urban space loses much of its reassuring coherence and apparent homogeneity which being enclosed provides” (2005, 48).

The recent interest in the Archaic development of Thasos town has removed some of the reassuring familiarity from this well-known Greek colony. A stimulating discussion of this material has recently been published by de Polignac (de Polignac 2005). In Thasos, the initial phases of settlement seem to be particularly scattered (Fig. 7.1). It has been accepted for some time that there appear to be two nuclei of settlement in the earliest phase of the colony, both of which seem to be centred around sanctuaries (Grandjean 1988). To the northeast, there is the Artemision, which seems to be orientated to the harbour area. To the southwest there is the Herakleion, which appears to be orientated rather more to the interior. Grandjean’s hypotheses held that the *agora* lay in its Classical location between these two nuclei, and formed a meeting place between the two (see Grandjean 1988; de Polignac 2005, figs 3.3b and c). However, new evidence has indicated that the *agora* was moved to the area which it now occupies no earlier than the fifth century BC (Blondé *et al.* 2002, 260 n. 42). It is, for example, clear that the Glaukos *mnema* (the most ancient inscription we have from Thasos, dating to the second half of the seventh century BC) was moved to a location near the *agora* in the late sixth century BC (Blondé *et al.* 2002, 259–60). In addition, investigations have shown that the location of the Classical *agora* was liable to flood and therefore was not used in the Archaic period (Blondé *et al.* 2002). The most likely location of the Archaic *agora* is in fact that suggested by Martin in 1978: in open ground beside the Artemision (Martin 1978; de Polignac 2005, figs 3b and e).

The recent discovery of a mid-sixth century wall which divides the two areas, separating off the Artemision and the *agora* from the area of the Herakleion, has further underlined the separation of the two clusters in the earliest period of Greek settlement (see Fig.

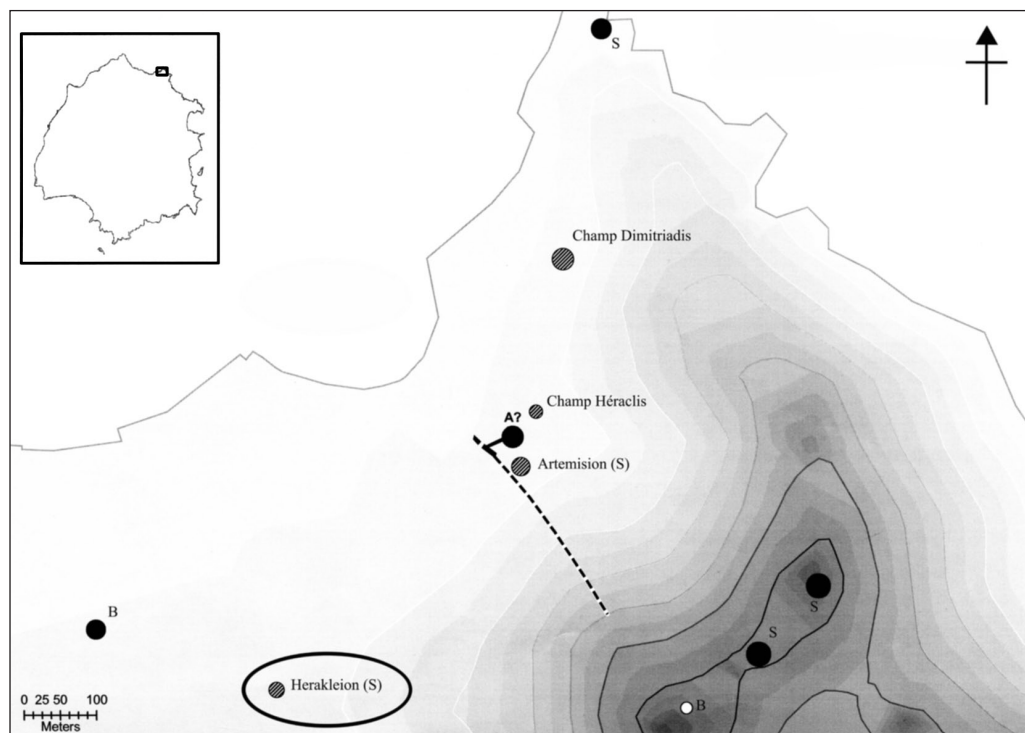


Figure 7.1 Thasos Limenas in the Archaic Period. Black circle = Archaic site; Hatched circle = EIA Thracian and Archaic site; White circle = EIA Thracian site; S = sanctuary; B = burials; A? = possible site of Archaic agora; Broken and unbroken line = line of mid sixth century wall. Oval around Herakleion indicates a focus of settlement. Figure by Jason Lucas and Laura Preston.

7.1). Traces of this wall have now been identified running from the acropolis slopes to the harbour to the south western side of the Artemision. The well known 'Passage of the *Theoroi*' is now hypothesized to be the final form of an original mid-sixth century gate ('Gate of the Charites') within that wall (Blondé *et al.* 2002, 256–8; de Polignac 2005, 56–8). Remains of a further wall to the north east of this area perhaps also divided this area from the settlement cluster near the Gate of Hermes: the Champs Dimitriadis (Viviers 1999, 232–6; de Polignac 2005, 58).

This new landscape of Archaic Thasos does not look like a conventional Greek city. In fact, it has the look of a scattered village structure rather than an urban centre. De Polignac has noted that these separate clusters, and in particular the presence of a wall dividing the Artemision and Herakleion quarters, give the impression of an upper town (containing the *agora* as well as the Artemision, and orientated towards the harbour). He has also pointed out that the Gate of the Charites, containing niches and *eschara*, might be more of a ritual gateway than a town gate (de Polignac 2005, 58). It is true that scholars have noted this

scattered pattern in other early phases of Greek colonies, most notably that of Megara Hyblaia (Fischer-Hansen 1996), and it is a feature of Early Iron Age settlement in prominent sites in the Greek mainland (*e.g.* Corinth, Athens and Sparta). The temptation therefore is to see this as a Greek phenomenon: to suppose that Greek urbanism emerged out of a sort of synoikism, even in the Greek colonies. Indeed, in this case it has been suggested that these separate clusters indicate that there were separate groups amongst the colonists who did not initially integrate well (Grandjean 1988, 486–7; de Polignac 2005, 60), or that these “unequal groupings of houses may reflect family interests or the ethnic origins of settlers, and perhaps also an orientation towards commerce rather than the land” (Morgan and Coulton 1997, 117). It is even possible that there may have been an *agora* (as yet undiscovered) associated with the Herakleion. But de Polignac has gone beyond this to suggest that in looking for uniformity we misunderstand the very essence of urbanization. His study in fact emphasizes “the dynamic and mobile nature of what is urban” (2005, 66), and suggests that “the scattering of settlements and of their activities would be, at least in some cases, an indication of a coherent organization of space aimed at mobilizing a whole range of resources on which the increase in power of those cities depended” (2005, 66). This may be true. But in placing Thasos and its peculiar landscape wholly in a ‘Greek’ context, the ‘Thracian’ context of this Archaic site is lost. In fact, the dynamism and experimentation of this period might have more to do with the locations of these cities than has previously been taken into account.

‘Thracian’ Thasos Limenas

Thasos town was not founded on a pristine site – *tabula rasa* for the imposition of a new Greek city. The archaeological evidence is now growing that a settlement existed on this spot from at least the eighth century BC. Furthermore, my recent research into the shifting use of the landscape on Thasos, as part of a Leverhulme project into the changing use of landscape in several areas colonized by ‘Greeks’, has indicated that a large change in settlement patterns occurred on Thasos during the course of the eighth century BC (see Fig. 7.2). This resulted in the gradual abandonment of inland, mountainous, settlements (including Larnaki and Kastri). By the end of the eighth century BC, Thasos town and Drykotrypa (a ritual cave site) are the only two Thracian settlements known on the island. This pattern could be seen as similar to the synoikism occurring in Paros at a similar time (see Lemos, this volume; cf. Osborne 2005), and gives no grounds for the idea that the Greek settlers directly and violently caused the abandonment of the site of Kastri.

The evidence for Thracian activity at Thasos town is also growing. Two deep sondages and the deepest levels of the Artemision produced ‘Thracian’ levels. In Champs Dimitriadis, there was little in the way of intact stratigraphy, but the context contained a good range of Thracian domestic ceramics (including a pithos *in situ*) as well as a variety of imported wares from Macedonia and the Aeolian area (Bernard 1964). Most attention has however been paid to sondage I in the Champs Héraclis area of the site. Here a deep trench uncovered a complex stratigraphic sequence. The lowest levels revealed an occupation layer, containing a wall belonging to an apsidal or ellipsoidal house. The ceramics found in this

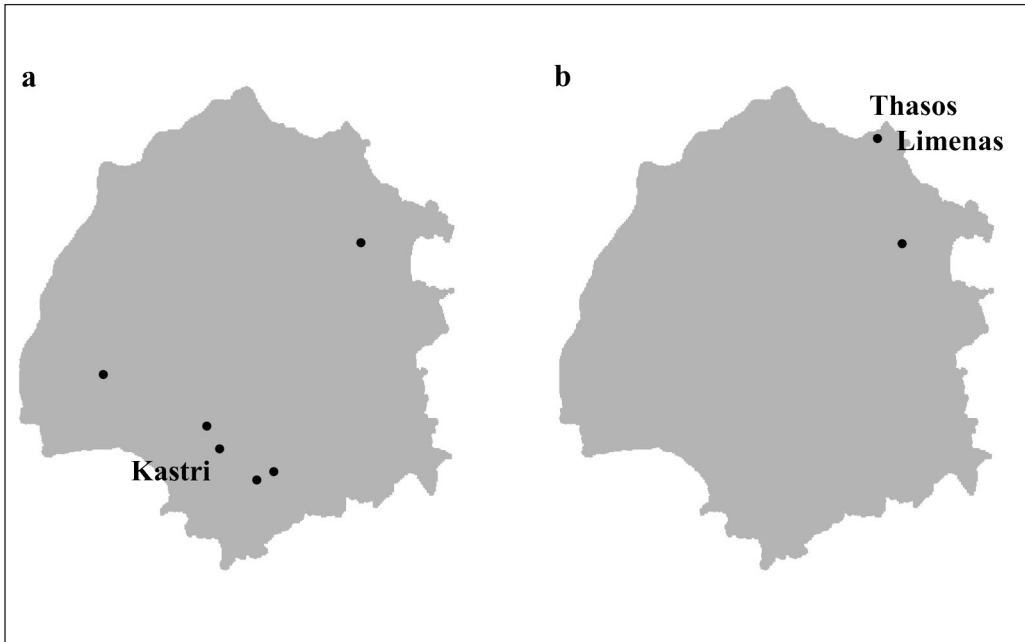


Figure 7.2 a: Thasos in the ELA (twelfth to eighth century BC); b: Thasos at the end of the eighth century BC. Figure by Jason Lucas and Laura Preston.

layer included Macedonian wares, Aeolian bucchero and G2–3 ware (a fine Aeolian type) (Bernard 1964; Graham 1978; Gimatzides 2002). The mixed ceramic assemblage, and the dating of this assemblage to the first half of the seventh century by Bernard (1964), initially gave rise to debate as to whether this house was inhabited by the first Parian settlers (so Bernard 1964, 80–3) or ‘Thracians’ (so Graham 1978; Grandjean 1988). However, it was difficult for those who supported the idea that the house was Parian to explain away the lack of Parian ceramics in these levels (see Graham 1978; Owen 2000a, 150–7). It was even suggested that this was due to an incapacity of the first generation of Parians to make or obtain Cycladic ceramics (Bernard 1964; Weill 1985, 210). A re-excavation of this sondage, prompted by Muller’s critical discussion of the chronology (Muller 2000) has however clarified the situation. These new soundings have persuaded the excavators that the complex stratigraphic sequence belongs to a Thracian context which begins in the eighth century BC. The sequence involves not one but two Thracian structures (of which the apsidal house was the second), and substantial evidence of iron working (Kohl *et al.* 2002). The Aeolian bucchero and G2–3 wares testify to strong trading links at this time, but on a different trajectory from those that are present after the appearance of Parian settlers in the mid seventh century BC (Graham 1978). What is particularly interesting about this context, however, is that, in the publication of Bernard (1964), the apsidal house, its predecessor and environs contain next to no domestic Thracian cooking wares.

In fact, the preponderance of drinking vessels and amphorae from the Macedonian region seems to indicate a context in which ritualized drinking, probably of imported wine, was practised (Owen, forthcoming). It should not surprise us to find a ritual drinking context in the environs of a forge. In many societies metalworking in general and ironworking in particular is a polluted or ritualized activity, associated with magical transformations. I have argued elsewhere that there is evidence of such an association in the Thracian Early Iron Age (Owen 2000a, 77–97; forthcoming).

There is also evidence of ironworking near the Artemision, and under the Passage de Theoroi. Although these two contexts have not been precisely dated it is possible that the whole region between the Artemision, the Champs Héraclis and the Passage de Theoroi was an iron production area in the pre-colonial period. Erosion from the acropolis, associated with deforestation which was once associated with the arrival of the 'Greeks', might well have begun earlier due to Thracian industrial activities (Sintès 2000; Kohl *et al.* 2002).

The Artemision, near the apsidal house, contains similar deposits of ceramics. It has been suggested here too that these layers constitute evidence of the first 'Greeks' (Weill 1985). However, given that the most diagnostic ceramics (such as G 2–3 ware) from the Champs Héraclis have now been dated to the late eighth century, there would seem to be little doubt that these early levels of the Artemision also antedate Greek colonization. Indeed, these deepest levels also contain prestige items such as North Syrian ivories, dating to the eighth century BC (Winter 1976) and Thracian fibulae dating to the eighth and early seventh centuries BC (Owen 2000a, 160–1, fig. 10.3; cf. Gergova 1987). Some of these early offerings date to a time well before the earliest dates given for the Greek settlement. It seems to me that it is now difficult to dismiss the idea, already suggested by Grandjean, that there was a Thracian cult on this spot which was taken over by the Parian settlers when they arrived (Grandjean 1988, 436–41).

Another candidate for a Thracian ritual spot is the Herakleion. This is commonly held to have been founded before the Greek settlement of Thasos. This is perhaps for two reasons. First, it possesses a strange rock altar that has eluded dating and explanation. Second, there is a statement by Herodotus (II 44.3–4; VI 47) to the effect that the island was a Phoenician colony before the 'Greeks' settled there. Scholars have pointed out that the place names Ainyra and Koinyra could be Semitic (Salviat and Servais 1964, 282–4), and Semitic elements are also suggested in Pausanias' description of the Thasian Herakles cult (Van Berchem 1967, 80–7). A full discussion of all the arguments can be found in Graham's superb 1978 article (1978, 88–92). His suggestion that the orientation of trade, and particularly the presence of Lemnian G2–3 wares in the pre-colonization layers, might form an archaeological argument for the presence of Phoenician traders and colonists is attractive (Graham 1978, 90). Any putative Phoenician trader is likely to have stopped off at Lemnos. But the absence of Phoenician material is still a sticking point. Only one find gives any evidence of Phoenician or North Syrian contacts in Thasos – the North Syrian ivories in the Artemision. There are some indications of contact with the Near East in North Aegean Thrace. At Lubtcha, the presence of a scarab in a grave of the eighth century is an indication of some links (see Kisiov 1988; Owen 2000a, 104, fig. 7.1). However, while I would be happy to accept that traders

perhaps visited these shores, there is as yet no archaeological evidence of a Phoenician *colony* at Thasos.

A far stronger argument for pre-Greek origins of the Herakleion comes from the Thracian perspective. And it is here that we return to the rock altar that has so worried scholars (see *e.g.* Launey 1944; Pouilloux 1954, 18–21, 98–9, 352–63; Bergquist 1973). The rock altar does not contain any dating evidence. Although ashes, bones and tiny fragments of ceramic were found on it, they were useless for dating purposes, due both to the small sizes of the fragments, and to the fact that the altar seems to have been used from at least the seventh to the third century BC, and indeed constituted the central feature of the sanctuary for that whole period (Bergquist 1973, 57).

The main feature upon which comment has been made, is the appearance of what Bergquist terms *bothroi* beside the altar (Bergquist 1973, 31). These irregular dips in the rock are uneven in size and spacing and must remind anyone familiar with the Thracian 'megalithic culture' of the so-called 'basins' which litter the landscape of Southern Thrace, some of which have been found as far south as Hagios Georgios near Maroneia (Najdenova 1990; Triandaphyllos 1994; Owen 2000a). This possibility was suggested by Graham in his final article on Thasos (2001, 383–4). Even more striking, however, is the resemblance between the northern end of the altar and another element of the 'megalithic culture'. That is the so-called sacrificial stones (Owen 2000a, 59–76; forthcoming). These are small outcrops of rock into which are carved small hollows and channels, reputedly for sacrificial purposes.

The 'megalithic culture' is a generalized name for a series of phenomena ranging from dolmens, built tombs and rock cut tombs to a range of rock art and channels carved into the rock, almost all of which seem to have had some sort of ritual function. Such features are notoriously difficult to date, but the ceramics that occur around them in Southern Thrace and the Rhodope and Sakar Mountains belong to the Early Iron Age period (see Fol 1982; Delev 1982; 1984; Owen 2000a; 2000b; forthcoming).

The idea that the Herakleion began its life as a Thracian cult has already been suggested by Devambez on the basis of its location alone (Devambez 1955). If it is the case that this altar began its existence as part of a Thracian cult, it is extremely significant that the Parian colonists maintained this cult spot, building their own structures around it (see Bergquist 1973).

A 'Thracian' landscape?

On their own, each of these pockets of possible Thracian activity is perhaps unremarkable. There are plenty of sites across the North Aegean in which colonies are founded on the site of existing settlements (Isaac 1986). However, I would argue that an interesting pattern is revealed when the spread of initial Greek activity is compared with the locations of Thracian activity. As Fig. 7.1 shows, there is almost a complete match. Archaic Thasos, as we have established, looks nothing like the conventional view of the developing Greek town, yet scholars have attempted to find reasons within a purely Greek context for why that might be the case. I would suggest that de Polignac is correct – there is no reason why all early

cities should be tightly nucleated and identical in form. However, what has not yet been taken into account is that this new settlement is within a Thracian context. What is more, the Greek areas of settlement and ritual seem to be integrating into the locales used by the indigenous 'Thracians', focussed around two ritual sites used by them.

There is little sign of urbanism, traditionally characterised, in the Thracian Early Iron Age. Whilst some studies have explored the relevance of the fortification that seems to be a feature of many Early Iron Age hill sites, few would go so far as to suggest that these must indicate urbanism as such (but Peikov 1986. Cf. Domaradski 1986; Domaradski *et al.* 1991; Archibald 1998). The most stimulating discussion is that of Gotzev (1997). He notes that the scattering of settlements in mountainous areas is a feature of the Early Iron Age settlement system. Indeed, the numbers of settlements increase at the beginning of the Early Iron Age rather than decrease, as in Greece, and this can be put down to the fragmentation of the settlement system – settlements are smaller and centralization, which was a feature of the Bronze Age pattern with its large tells, seems to disappear. I have suggested elsewhere that the distribution of dolmens along routes of communication through Southern Thrace towards the Sakar mountain, indicates a society which, in the early part of the Early Iron Age (EIA I, or the eleventh to ninth centuries BC), was semi-mobile (Owen 2000a, 59–76; 2000b). At the beginning of the second period of the Early Iron Age (*i.e.* by the eighth century BC), Gotzev points to evidence of nucleation of people in larger settlements (such as Ovcharovo and Branitsa) which seem to show some evidence of craft specialization. There is also evidence that some areas were reserved for ritual purposes, such as the Sakar Mountain on which only burial and ritual sites have been found (Gotzev 1997; Owen 2000a, 59–76). Another significant pattern is that settlement seems to be drawn around these ritual areas and sites (Gotzev 1997).

The nucleation which occurs over the course of the ninth and eighth centuries BC on the island of Thasos is in keeping with this broader pattern. It might also be the case that in Thasos too, areas of ritual activity attracted settlement. The sacrificial stone at the later Herakleion, the Artemision and even the Cave of Pan (Owen 2000b) and the successive structures at the Champs Héraclis could well have been sacred spots for the local Thasians – perhaps as loci of integration with many different groups of mainland 'Thracians'. The visibility between the megalithic sites and the mainland is good, according to work carried out by Jason Lucas (Lucas *et al.* forthcoming). It is not far-fetched to suggest that these ritual locations were deliberately chosen for that reason. The clustering of settlement around these loci of interaction could be seen as an obvious step given the rising levels of trade and interaction with the outside world.

Conclusion

The story of the growth of the Greek town of Thasos is therefore much more complex than had been imagined by previous generations of scholars. The picture that is slowly emerging from excavations here and in other prominent Thracian sites, is of the gradual coming together in the eighth century of settlements into larger units whose locations seem

to be dictated by the presence of pre-existing ritual areas. This 'synoikism' coincides with a significant escalation in trade, and the presence of Macedonian amphorae with Geometric decoration in many North Aegean sites, including Thasos, seems to indicate a large-scale trade in wine and other consumables that spread from the Macedonian heartland to the Troad (Bernard 1964; Bozhkova 2005). In Thasos town fragments of 32 such vessels were found in the two deep sondages alone (Bernard 1964). The range of ceramics within the Thasos town sondages (incorporating Macedonian Olynthos and Geometric wares, Aeolian bucchero and G2–3 ware, Lemnian G2–3 ware and a pendent semi circle skyphos) is good evidence for the breadth of the links. The exploitation and working of mineral resources (such as iron and lead) also seem to be thriving prior to Greek presence.

Osborne has argued that the new wave of relatively populous nucleated settlements which appeared throughout Greece during the eighth century BC was ultimately a result of increased levels of trade (Osborne 2005). As he argues, Pithekoussai, with its dense, large occupation on a rocky island, only makes sense as a port of call if ship-borne trade was regular and common (Osborne 1996; 2005, 12). The argument that the so-called 'failed *poleis*' (such as Koukounaries on Paros) were abandoned because their locations were not able to take advantage of such trade is a convincing one (Osborne 2005, 11–12; cf. Lemos *et al.*, this volume). Ports-of-call needed to be large and accessible: "of a size to guarantee that there would be goods to be supplied and demanded, and of a density to ensure that all transactions could be done at a one-stop shop" (Osborne 2005, 12). If this was a common pattern for settlements in the Greek context, there is no reason why similar circumstances did not lead to similar social reactions elsewhere. Indeed, the evidence from eighth and early seventh century Thasos suggests that a similar process was occurring in this Thracian context. Over the course of the eighth century BC, just after trade links become evident in the Kastri cemetery, the population orientation of the island moves from the transitional zones of the southwestern side of the island to the northern harbour of Thasos Limenas. Whilst the evidence from Thasos town is still scant, the large area over which remains are scattered (identical to the area over which sixth century remains are distributed) and the evidence of large-scale industrial workings of iron on the site may indicate that a sizeable population had been drawn together on this site by the end of the eighth century BC. More evidence is needed, but there are good reasons to explore the idea that Thracian Thasos town was indeed a port-of-call in the eighth century BC.

All these features – the evidence of common ritual areas, the presence of an ironworking area, the coordination of extraction of the minerals and the wide trade network – might, in a Greek context, be used to indicate a settlement that was on the way to becoming urbanized. Whether these features are enough to posit urbanization in the Thracian or the Early Archaic Greek contexts (and the debate will doubtless continue on this), it should in any case be noted that the 'Thracian' way of living in this place was adopted by the incoming Parian 'Greeks', and is still visible in the structure of Thasos Limenas more than a century after the Parian settlement. It therefore underlies the urban fabric of the Classical Greek city.

The Early Iron Age and Early Archaic evidence from Thasos is still scanty, and I am aware that much of what I have suggested is speculative. This article therefore forms a plea for more

work to be undertaken in this important area. In research on the Greek mainland, much heed is taken of the settlement patterns before synoikism and urbanization – the gradual moving together, and the sharing of ritual, industrial and mortuary landscape. In the Greek colonies, however, it is still assumed that the landscape was *tabula rasa* for the imposition of the Greek town. In fact it might even be assumed that the colonies can give us a clearer view, as the context is ‘clean’ and ‘unencumbered’ by previous settlement: the towns do not need to grow within limits of previous settlement. It is my contention, however, that there *is* a previous inhabited landscape to be taken into account. In fact, unless we acknowledge the local histories and landscapes of these Early Archaic Greek settlements, we cannot hope to understand all the influences that contributed to their varied organizations. The variety of urban forms in Archaic ‘colonies’ owes more than a little to their local contexts.

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8 The Classical Greek Cemetery: a Barometer of Citizenship?

Anthony Snodgrass

A contribution on cemeteries may seem to fit awkwardly into a volume entitled 'Inside the City': according to conventional wisdom anyway, communal burial was an activity which almost by definition should take place *outside* the city. But that is being too literal: we can gain intimate access to a city through its burials. I start, therefore, with a semi-frivolous observation which can be taken as a parody of the famed (at least in North American archaeology) Saxe-Goldstein no.8 Hypothesis (Saxe 1970; Goldstein 1981). The essence of that hypothesis was that, to the degree that a culture has a corporate group structure in the form of a lineal descent system which confers entitlement to property, it is to the same degree likely that that culture will use a formal, bounded, disposal area for the dead. My own hypothesis is this: to the degree that a culture has a corporate group structure in the form of a lineal descent system which confers entitlement to property, it is to the same degree *unlikely* that archaeologists will spend much time studying their formal, bounded disposal areas for the dead. Put crudely, the more complex a past society, the less research will be devoted to its cemeteries.

This complexity should be assessed in relative terms: relative, that is, to the other periods in the history of a given country, where archaeologists may encounter all or any of these in their fieldwork and then, for the purposes of their research, make a choice between them. To take the example of Britain: specialists in British prehistory tirelessly study megalithic and other burials, just as their later counterparts do Anglo-Saxon cemeteries; but in between these two epochs, I have heard burial archaeology (rightly) called 'a blind spot' for Romano-British archaeologists. For Greece, similar rules apply: think of the overwhelming dependence on funerary evidence of the archaeology of, say, the Middle Bronze Age, or the Early Iron Age, or of a historical but less complex society like ancient Macedonia, and then contrast it with the impoverished state of research on Classical, Hellenistic or Roman Imperial cemeteries.

This tendency operates in defiance of the argument of Ian Morris that "the potential of burial evidence increases in direct proportion to the amount of other types of sources we have" (Morris 1992, 204). But if my point is a fairly obvious one, it invites an equally obvious response: that this state of affairs reflects not scholarly choice, but availability of evidence. The more 'backward' cultures and epochs, like Bronze Age or Anglo-Saxon Britain, or Early Iron Age Greece, are less likely to leave behind impressive or even durable

settlement architecture, so that students turn inevitably to their cemeteries. There is much truth in this counter-claim; but it does not fully own up to the positive attraction of discovering graves from those less complex societies which are rich in grave-goods or architecturally impressive, or both; nor, conversely, is it quite honest about the exercise of free choice in preferring to study Classical temples, Hellenistic statues or Roman Imperial *fora*, rather than cemeteries from these periods. In the latter case at least, the choice is there, but the burial evidence is seen as being neither appealing nor very informative.

Beyond a certain point, in other words, this pattern of behaviour on the archaeologists' part is neither quite so predictable, nor so easily defensible, as it is presented. It is easier to explain it in terms of individual career interests than it is to defend it in terms of external material realities. Yet according to received archaeological wisdom, if we had a richer knowledge of the cemeteries of Classical Athens and other cities, or of Imperial Rome and its provincial capitals, we should greatly gain in understanding of their social structure, their distribution of wealth and property, and the degree of flexibility or divisiveness in their apportionment of power – unless, that is, we already know enough about these aspects from documentary sources. Tacitly, perhaps, it is assumed that we do.

There are in fact certain widely-held beliefs, axioms even, about burial in the developed Classical Greek polis which deserve re-examination. Among these are that burial, at least for the citizen population, always took place in formal cemeteries; that these cemeteries were located extramurally to the settlements, at the nearest convenient point to the edge of the built-up area; that these formal cemeteries were relatively planned and orderly in their layout, like most modern Western inhumation cemeteries; and that eligibility for burial in them was near-universal, at least for citizen families.

I find exceptions to all four of these axioms. First, isolated rural burials show that neither the 'formal cemetery' requirement, nor the peri-urban location, could be fully applied to that minority who, as we know from the archaeology of Classical Attica and Boeotia, chose for whatever reason to be buried on their rural properties (Lohmann 1994, 184–94; Snodgrass 1998). This is to say nothing of a curious inscription from Gortyn in Crete (Guarducci 1950, 47, no. 46B), prescribing when one might or might not cross someone else's property in order to bury a deceased family member – something quite incompatible with an exclusive use of formal cemeteries (compare the inscription from Gonnoi, below). Next, there is evidence that the ban on intramural adult burial was not universal, both from the historically-attested cases of Sparta and Taras, where we know that there was a different attitude to the city's dead, and from the undocumented case of Cretan cities. Here intramural burial is definitely attested at Eleutherna (Stampolidis 1994, 48), probable at Gortyn where reused Classical grave-stelai were found in the heart of the city (Guarducci 1950, 2, 8), and possible at Knossos (Coldstream 2000). Corinth, with Classical burials scattered over the Potters' Quarter (Stillwell 1948, 23–5, 29–30, 33–4, 59–60) and even Classical Athens on occasion breached this and other rules, as we shall see in a moment. Next, there were cemeteries even in conventional locations which were far from regular in lay-out: the description of the South Cemetery at Samothrace, in use from about 550 BC to AD 100, where the (mainly cremation) burials were serially re-located, damaged,

robbed, pushed aside and generally vandalised by later buriers, gave one vivid picture of lack of organisation (Dusenbery 1998). Finally, on the issue of admissibility to burial, I find that, on top of Morris' well-known case for exclusivity in burial at Athens down to the late sixth century BC, there is evidence (yet again from Crete) for the operation of something in the nature of age-class divisions in burial at early Knossos. We look now at some of these and then, more briefly, at some of their smaller brethren.

I start out from the alarming map published by Morris (Fig. 8.1) of the excavations carried out by the Greek Archaeological Service in modern Athens between 1960 and 1978. It is alarming because of what it implies for the conditions under which excavations must take place within a modern Greek conurbation, under the sharp constraints of space which arise when, under Greek law, building construction over a known ancient site must be preceded by a search for archaeological remains. This map covers only an 18-year

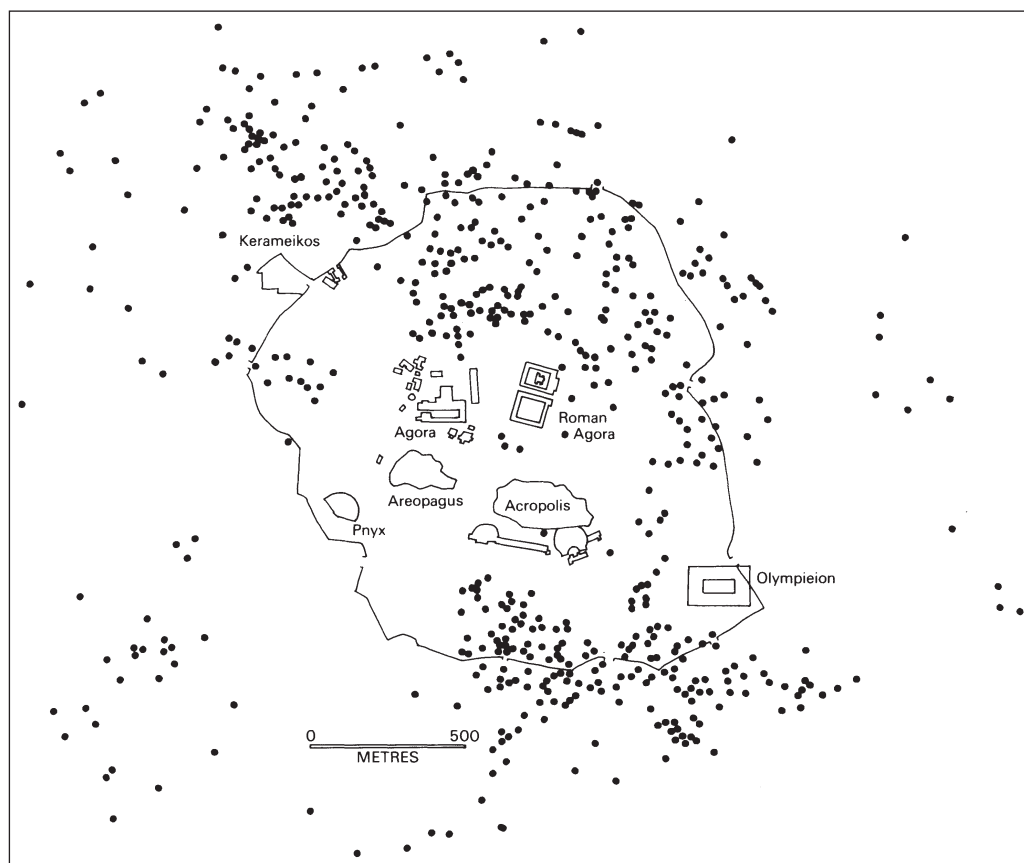


Figure 8.1 Excavations of the Greek Archaeological Service at Athens, 1960–1978. After Morris 1987, 102, fig. 31 (© Cambridge University Press).

period: the development of Athens, before and since, has proceeded at a similar pace for a period nearly three times that length, so that mentally we should imagine nearly three times as many dots on this map, including the more recent and unusually large-scale undertakings associated with the building of the Athens Metro in the mid-1990's (Parlama and Stampolidis 2001).

The modern city is of course vastly larger than Classical Athens. The line of the wall on this map is that of the fortifications of the early Classical period and a majority of the dots lie outside it. Of these, a high proportion have yielded graves, Classical and other. But what of the dots within the circuit? Here, too, numerous burials from the pre-Classical periods have been found, when the city was both smaller and less nucleated than in the fifth century, so that it is hardly surprising that early burials should have been found within what later became the built-up area. In any case, there is strong archaeological evidence for thinking that, in Athens, no strict rule against intramural burial came into being before about 500 BC. A letter of Cicero's (*ad Fam.* iv, 12,3) of the first century BC, which states explicitly that he was refused permission to bury within Athens "because it was forbidden on grounds of religion", is the first and only explicit written testimony to such a law. And, whatever the reality of this 'law', it is universally acknowledged not to have held good for small children and infants: in many periods, including the Classical, neo-natal children were interred in courtyards and even under house-floors, often within ceramic vessels.

What would be disturbing would be finds of Athenian *adult* burials of Classical date, after the legislation is presumed to have been imposed, within the fifth-century circuit. Yet in 1967 alone, two such cases occurred, both located just north of the ancient Agora and involving not single graves but small groups. On Leokorion Street, a group of eleven burials of the fourth century BC were partly of infants in pots, but partly in pits which were thought to be adult graves: a relief with a funerary banquet probably belonged to one of them. A few yards away in Karaiskakis Street, two cremation-graves of the late fifth century, with urns and other grave-goods, conformed to contemporary practice for adults (Alexandri 1968, 71–3 and 65 respectively). This is enough to qualify one of the hallowed beliefs of Greek archaeology.

Pride of place among Athenian cemeteries must go to the Kerameikos – so emblematic (and so unusually fully published) that I suspect it has formed the main basis on which the common modern doctrine of orderly Greek cemetery planning is founded. Recent finds are however changing its image. The new Athens Metro incorporates a Kerameikos Station, and in the mid-1990's an extensive further excavation therefore took place in what had been a modern built-up area, beyond the long since demarcated archaeological zone. This revealed part of a vast new grave-plot which wears a rather different look: it runs crosswise between two streets, and the graves are jammed together without any visible system (Parlama and Stampolidis 2001, 264–71). The new excavations have also brought to light two examples of something whose presence had long been suspected by historians: indiscriminate mass-burials, with few or no grave-offerings (Parlama and Stampolidis 2001, 271–3). The first of the two mass-graves seems to date to around 430 BC, neatly coinciding with the recorded event most likely to have generated it, the notorious Athenian plague; the second seems

to be a shade later, and may mark some unrecorded Athenian disaster. They show how, under extreme duress, the regular burial-practices of a community might be abandoned.

But exclusivity in admission to burial is the longer-term obstacle to any belief in a well-ordered system of universal citizen burial in formal cemeteries, for access to which (to quote Steve MacQueen in *The Magnificent Seven*, on Boot Hill cemetery) “I always thought the only thing you had to be was dead”. I mention first Morris’ well-known finding that at Athens, from the eleventh century BC to the late sixth, some such exclusivity, with only a brief interruption between about 750 and 700, must have been in operation (Morris 1987, 72–96). Even the most extensively-explored cemeteries do not yield nearly enough burials, relative to the estimated population of Athens; the plots and cemeteries in which they occur are mostly very small; and, most important of all, they do not have the right combination of burials, with women and, especially, children being severely under-represented. This is hardly surprising for the early centuries of the Iron Age, when severe restrictions on formal burial prevailed (Morris 1987). What is more remarkable is that only from c. 510 BC, deep into the historical period, does the right mixture of age- and gender-groups appear; the frequency of burials rises sharply, to give a much higher ratio in proportion to the estimated population; the typical cemetery-size increases from about 15 to about 50, and the typical burial-plot, either within it or in separate locations, from 3 to 10.

These changes herald the permanent adoption of what we may call ‘universal’ formal burial in the city of Athens, though even then it did not embrace the behaviour of all its citizens. From now on, the urban citizen nuclear family could expect to have its own burial-plot in a formal cemetery, and to use it for several generations while the lineage lasted. Women and children (provided that they were of citizen families) now shared the same rights. The whole pattern can be much more clearly illustrated in the now famous example of the rural, but nucleated, cemetery of Pantanello in the territory of Metaponto, in use from about 575 to 275 BC (Carter 1998). Here a combination of the unusually accurate archaeological chronology, the groupings of burials, and the determinations of sex, age and heredity by the anthropologists, made it possible to draw up family trees in which only the precise nature of the relationships within each connected group had to be guessed at: everything else – age at death, date of death and therefore of birth too, gender, occupational pathology and so on – was more or less secure (Carter 1998, 156–60). When the family groups were plotted precisely on to the ground, they fell neatly into small plots (Carter 1998, 162, fig. 5A7), round which one could draw a hypothetical rectangular boundary, with very little ‘trespassing’. This is a perfect example of the model of universal formal burial, to correspond with that highly-developed society of the living which we call the citizen-state. In the case of Athens certainly, and in that of Metapontum probably intermittently, this society took a specifically democratic form.

The general correlation posited by the Saxe/Goldstein hypothesis is clearly present in these cases. But in Athens at least, as Ian Morris argued in his closer study of their hypothesis (Morris 1991), it has to be glossed with the observation that the use of formal cemeteries was more important to the corporate group of citizens as a whole, which of course itself posed as being one large descent group, than for the nuclear family. Equally, in

an interesting inscription recording a border dispute from third-century Gonnoi in remote northern Thessaly (Helly 1973, 100–7, no. 93), the identification of the burial-places of individual citizens is used as key evidence in deciding this dispute between the city of Gonnoi and its Macedonian neighbour Herakleia. The community was everything.

More important, at Athens and everywhere else in the Greek world, was the fact that these arrangements did not so much reflect the practices of reality, as they did the received ideological dogma. Adults must never be buried in the settlement area – well, hardly ever. Citizens must be buried in the formal citizen cemeteries – unless of course they chose to be buried somewhere else. Non-citizens must never be admitted to them – except in special cases. These formal citizen cemeteries must be properly laid out by the road-side just outside the built-up area, preferably with uniform orientation – unless the topography made that too awkward. And so on, in a sort of collective version of the adage ‘It’s do as I say, not do as I do’. Such clashes between ideological precept and real practice, and the infinite variety of devices purporting to reconcile the two, are subtleties beyond the reach of the Saxe/Goldstein hypothesis which, in keeping with the nomothetic archaeology of the 1960’s and 1970’s, imagined itself to be both descriptive of reality and universally valid; and which was also guilty, according to Whitley (2002, 120), of an unacceptably loose use of the terms ‘ancestor’ and ‘ancestral’ as an explanatory factor.

But it does score a hit with its close emphasis on property. In a democratic city like Athens, property was indissolubly linked with citizenship, so it is not surprising to find it prominent also in the funerary sphere. The isolated Classical burials in the rural *chora*, which are becoming a familiar feature in survey reports, were presumably located on the owner’s land. More certainly, property is at the heart of the issue in the Gonnoi inscription, where the community’s claim on the territory is based on the assumption that, if a couple of citizens of Gonnoi were buried there, this proves that it was their (and thus their city’s) property. It is also the issue at stake in the Gortyn inscription, mentioned above, where one might sometimes – if there was no road, for instance – cross someone else’s property in order to bury somebody on one’s own. Much later, it still underlies a whole series of provisions in the Roman Digest which prescribe the cases when it was lawful, for example, to continue to bury on land which one had sold or to dig up a corpse unlawfully buried on one’s own property (Snodgrass 1998).

But we have also glimpsed survivals of an older order of society, one in which a large sector of the population was evidently excluded, not merely from the formal cemeteries, but from any archaeologically recoverable formal burial at all. That is the logical conclusion to be derived from Morris’s study of pre-Classical Athens (above, p. 103). What is surprising to us is that such an old practice should have endured so late at Athens. If the Saxe/Goldstein hypothesis is right in maintaining an intimate link between property and formal burial in cemeteries, then this is a very harsh application of it: we should have to assume that the missing Athenians were excluded not just from formal burial, but from property-ownership altogether.

Asymmetry is present in a rather different form in the sample of early burials in collective tombs at Knossos North Cemetery (Coldstream and Catling 1996). Notable features here

are the general lack of attention given to the burials of women; and, in a cemetery where many collective tombs enjoyed a life-span exceeding 250 years, the recurrence, in the same tomb, of either 'rich' or 'poor' burials over this long period. Such evidence led Sallares to see this and other cemeteries as reflecting the operation of an age / class system, such as we know to have prevailed at times in Crete (Sallares 1991, 169, 184–5, 192). In publishing the cemetery in 1996, we had assumed that we were dealing with successive generations of nuclear families, and saw the long-term recurrence of rich or poor burials in a given tomb as indicating lasting familial wealth, or lack of it. But the possibility also exists that the buriers in each tomb, rather than belonging to separate families, were successive generations of a given age-class. There is some segregation of the sexes and the presumed 'female' tombs (also sometimes reused over centuries) are relatively poorly furnished. There are sharp social divisions. There is a small intermediate group of 'sub-warrior' burials (Tombs 60, 106, 125), which could be plausibly identified as 'ephebe' tombs, for those who died before they could outgrow their membership of an adolescent age-class. But the presence, in some cases, of female and sub-adult burials along with adult male ones shows that the pure age-class hypothesis must be modified into some such form as "separate burial for members of an age-class *and their dependants*".

We may end by moving from the larger to the smaller end of the spectrum in the Archaic and Classical worlds. There are one or two examples to choose from, which offer something at least approaching a completely-excavated small settlement and a full complement of its burials. One of these is the tiny Archaic fortified settlement at Vroulia on the southern tip of the island of Rhodes (Kinch 1914). It was occupied for a bare fifty years in the late seventh and early sixth centuries BC. The settlement is laid out in such a way that the houses themselves serve to fence off their little headland from the rest of the island. Outside them, to the north, the excavator Kinch found what he believed, after extensive and fruitless searches elsewhere, to be its one and only cemetery. Morris studied closely the seven groupings of graves (they were Kinch's own divisions) which made up the cemetery (Morris 1992, 174–99). There is convincing evidence that these divisions are kinship-based as well as socially segregated, but they are also age-segregated, with children below the age of six being disposed of not only with a different grave-form, ritual and goods, but also in separate and apparently non-lineage-related locations, being merely inserted wherever there was space in the interstices between the adult kinship-groups.

Another fascinating example lies at an even remoter location, at Vitsa in the mountains of northern Epirus (Vokotopoulou 1986). Here we are at such an altitude – the 1040m (3400 ft.) contour runs through the site, with the cemeteries slightly lower down – that the excavator Ioulia Vokotopoulou reasonably judged that the site would hardly have been habitable in winter. She therefore saw it as the summer settlement of an annually transhumant population; but it was occupied, seasonally or otherwise, for fully 500 years, between the late ninth and the late fourth centuries BC. It boasted two cemeteries, located north and south of the settlement, and their exhaustive exploration yielded some 177 graves in all. This was not nearly enough for even this modest settlement over so long a period, and Vokotopoulou rightly pointed out that at least as many again would have died in

the winter settlement, somewhere in the plains below (1986, I, 340). What is interesting is the simple fact of the double cemeteries, overlapping entirely in their periods of use: Vokotopoulou inferred that the village housed two separate lineages (1986, I, 327).

The pattern of twin contemporary cemeteries, close together, recalls another, larger example at Samothrace. In publishing the South Cemetery, Dusenbery (1998) espoused the view that burial here may have been reserved for officials of the nearby Sanctuary of the Great Gods, and/or for unlucky pilgrims who were cut off during a visit to it. Initially, I was inclined to disagree (Snodgrass 2001): the South Nekropolis was located, in conformity to a common pattern, beside a road emerging from one of the city gates, on one of the few level pieces of ground in this steeply-sloping locality and I inferred that this is where it had to be positioned, regardless of the sanctuary. But now, I am coming round to Dusenbery's view, on the basis of evidence not included in her book. Another formal burial-ground has come to light between the sanctuary and the sea, now christened the 'North Cemetery' (Karadima and Koutsoumanis 1992). It differs in every possible way from the South Cemetery, being spacious and regular in contrast to the crowding and repeated disturbance there, and consisting of inhumations, not cremations: yet it covers almost exactly the same time-span, from Archaic to early Imperial Roman times. Whatever is happening here, we have two contemporary yet permanently segregated burying groups within the city, and it no longer seems far-fetched to infer that one of them might have had a hereditary connection with the sanctuary from which Samothrace derived so much of its prestige and revenues. Even if this is incorrect in detail, we can surely detect the presence of two mutually exclusive (presumably lineage-based) groups.

To sum up our findings: the formal city cemeteries of just a few sites are enough to show exceptions to some of our most cherished beliefs about Greek burial, such as that (by the Classical period at any rate) cemeteries had to be extra-mural, or that eligibility for burial in them was largely unrestricted. Exceptions to the first belief come not just from earlier centuries, nor only from the textually attested Classical cases of Sparta and Taras, but from Corinth, Crete and, intermittently, Athens too. Severe qualification of the second belief is necessary for pre-Classical Athens, while contemporary Crete may have applied to burial a form of its own, far from unrestrictive, principle of a society structured in age-classes. What these case-studies show is that the Classical model of formal burial in Greece had in any case been arrived at by a very slow convergence from older, but sometimes still extant, patterns in which divisions based on either the lineage (as represented in the evidence from Vroulia, Vitsa and Samothrace), or the even more archaic institution of age-classes (as at Knossos), took precedence over the community as a whole. Yet this, once again, is still just about compatible with the predictions of the Saxe/Goldstein hypothesis whose emphasis was on *degrees* of conformity to the fully-developed pattern of burial in permanent, specialised bounded areas for the disposal of the community's dead.

These issues involving the cemetery *as a whole* – location, universality, organisation, access to burial – have so often been eclipsed, in the earlier days of archaeology, by the study of the grave-goods in near-isolation, and today by study of the variation between individual burials: it is important that they should retain the prominence they deserve.

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9 The Urban Plan of Thourioi: Literary Sources and Archaeological Evidence for a Hippodamian City

Emanuele Greco

Hippodamus of Miletus

Archaeological literature on the history of Greek urbanism often uses the term ‘Hippodamian’ with reference to the founding of cities or the planning of new neighbourhoods from the Classical age onward. This usage ultimately goes back to the well-known passage in the *Politics* (1330b 21) where Aristotle speaks of a “new and Hippodamian way” of arranging houses which, he claims, contrasts with the previous (Archaic) one. In another famous passage in the *Politics* (1267b 22), Aristotle summarizes the *Peri Politeias* by Hippodamus, son of Euriphon. All that one gathers from this summary, however, is that Hippodamus planned Piraeus, and Aristotle appears mainly concerned with demolishing the thinker Hippodamus’ *Politeia* from the social and constitutional point of view. In my opinion, that is why contemporary scholars use the term ‘Hippodamian’ vaguely and improperly. We are unable to define Hippodamus’ urban planning theory precisely, unless we are satisfied with the often-repeated commonplace that the Milesian invented the orthogonal town-plan, but this was in fact used in Western Greek colonies over a century and a half before Hippodamus was born!

This issue has been connected with a chronological problem – whose commonly accepted explanation is actually a hard-dying modern fabrication – which has been present ever since German scholars attributed to Hippodamus (on no evidence whatsoever) the planning of the new Miletus, rebuilt around 470 BC by refugees returned after the city’s destruction by the Persians in 494 BC (Herodotus 6,18–20). If this were true, Hippodamus could not have been born later than 500 BC; but then we would have to dismiss as false Strabo’s (XIV,2,9) mention of his planning of Rhodes in 408 BC.

Thus, Hippodamus is alleged to have planned Miletus (although this is *not* mentioned in any source) but not Rhodes (although this *is* recorded in the literary sources). In my opinion, we should adhere to the evidence and conclude, instead, that the Milesian’s *akmè* occurred in the second half of the fifth century BC and that Piraeus (as archaeological data also appear to bear out) was planned around the middle of the fifth century BC, in the time of Pericles. The latter was also the sponsor of the Panhellenic colony of Thourioi (444 BC), in whose foundation Hippodamus of Miletus was allegedly involved (although the sources on this are late and not completely reliable), along with Protagoras of Abdera, Herodotus of Halicarnassus, and others.

Diodorus Siculus and the foundation of Thourioi

As is well-known, the Sicilian historian Diodorus Siculus' account (XII,10,6–7) of the intricate story of the foundation of the Panhellenic colony of Thourioi, at the site of Sybaris, includes one of the most admirable descriptions of a city plan ever to come down to us. Very probably, Diodorus' source here is Ephorus of Cumae, who must also have given a physical description of the city – a very rare instance in foundation narratives – since Pericles had intended Thourioi to be paradigmatic from the urban as well as the social and political point of view. This would appear to provide indirect confirmation that Hippodamus himself planned the city, or 'divided' it, to use Aristotle's expression.

Diodorus narrates that the colonists recognised the *Thouria* spring as the spot indicated by their oracle for the foundation, where there was "water to drink in due measure, but bread to eat without measure". They surrounded the area with a wall and divided it lengthwise with four *plateiai* and breadthwise with three, then further subdivided the areas between these streets with *stenopoi*, so that the city appeared "well laid out". The new foundation was called "Thourioi" after the name of the spring (in my opinion a clear sign of a break with the former Sybarite inhabitants of the area).

There is one detail in Diodorus' account that is quite unprecedented in a foundation story: the historian, besides describing the layout of the seven *plateiai*, also reports their names. The four lengthwise *plateiai* were called *Herakleia*, *Aphrodisias*, *Olympias* and *Dionysias*, the three breadthwise ones, *Heroa*, *Thouria* and *Thurina*. We will return to re-examine this source further in the light of archaeological discoveries.

Archaeological evidence: Sybaris, Thourioi and Copiae

From 1969 to 1974 – long after U. Zanotti Bianco first identified the site of Sybaris in 1932, when he brought to light the remains of the theatre of Copiae, the Latin colony founded in 194 BC at Thourioi – the Archaeological Superintendency of Calabria conducted several extensive excavation campaigns which uncovered over five hectares of the ancient city. These campaigns provided elements for a first study of the urban topography of this huge palimpsest dating from the eighth century BC to the seventh or eighth century AD (Sibari II–V).

In the passage examined above, it is noteworthy that Diodorus says that Thourioi was founded "not far" from Sybaris. This puts in very vague terms the issue of the relationship between the old Achaean city, destroyed by the Crotoniates in 510 BC, and the new foundation of 444 BC which in fact partially overlies it. The evidence from the 1969–74 excavations, however, does allow some observations to be made, although the investigated portion of Sybaris is so small compared with the huge later extent of Thourioi, that these can be little more than impressions (Fig. 9.1).

The northernmost of the excavated neighbourhoods (Stombi) yielded evidence pertaining to seventh and sixth century houses, with no later structures above them, except for a farm of the Hellenistic period. The fact that a rural settlement belonging to Thourioi overlay

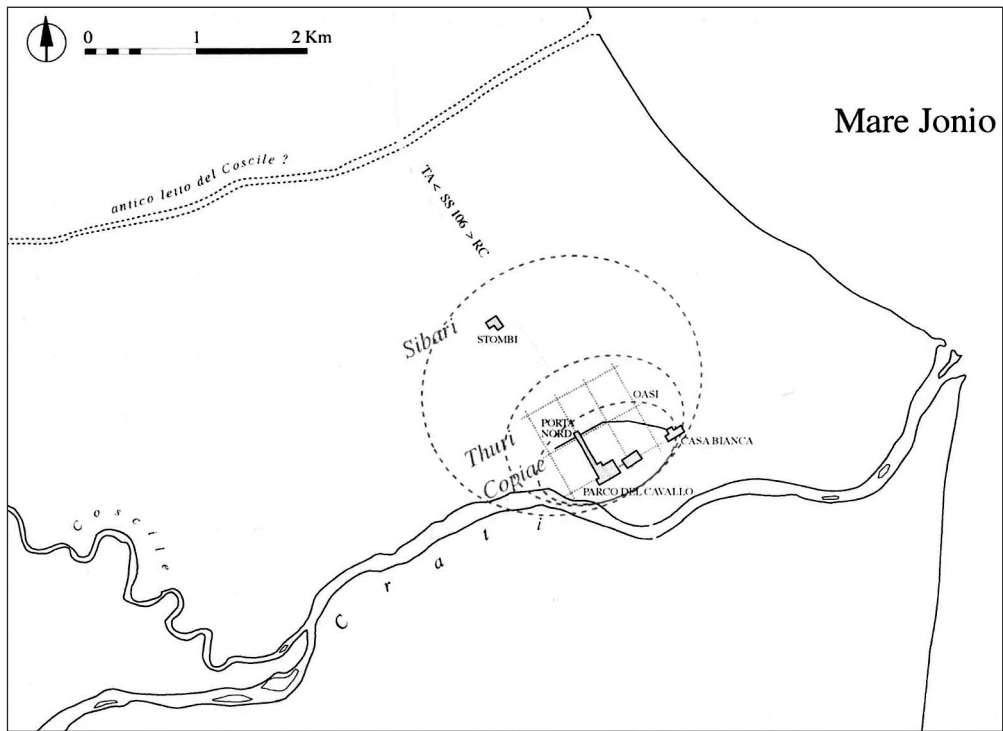


Figure 9.1 Plan of the site, with estimated areas of Sybaris, Thourioi and Copiae.

what had been an urban neighbourhood of Sybaris indicates that there was a considerable difference in the extents of the two cities, but at present we cannot say much more than that. The archaeological record tells a different story in the southernmost excavated areas, Porta Nord, Parco del Cavallo, and Prolungamento Strada, where it was possible to ascertain the stratigraphic superimposition of Sybaris, Thourioi and Copiae (Figs 9.2 and 9.3). Here, several in-depth soundings revealed a layer of yellowish alluvial silts, about 40–50cm deep, containing abundant late Archaic pottery. This has been rightly interpreted as the stratum accumulated from 510 to 444 BC, a period when the site was apparently uninhabited (Greco, Luppino *et al.* 1999).

Further significant, although still partial, evidence was provided by the very recent excavation of the Porta Nord, the northern gate of the walls of the Roman city – which was much smaller than the Greek one. Stratigraphic soundings revealed a sequence of beaten earth streets datable from the second half of the fifth century to Roman imperial times. Further down, under the silts sealing the strata of the Archaic period, is a *plateia* flanked by houses with at least two floor levels, datable within the second half of the sixth century BC. This *plateia* has the same orientation as the later street of the Classical period. Thus, at least in this area, we made the surprising discovery that Hippodamus' plan incorporated

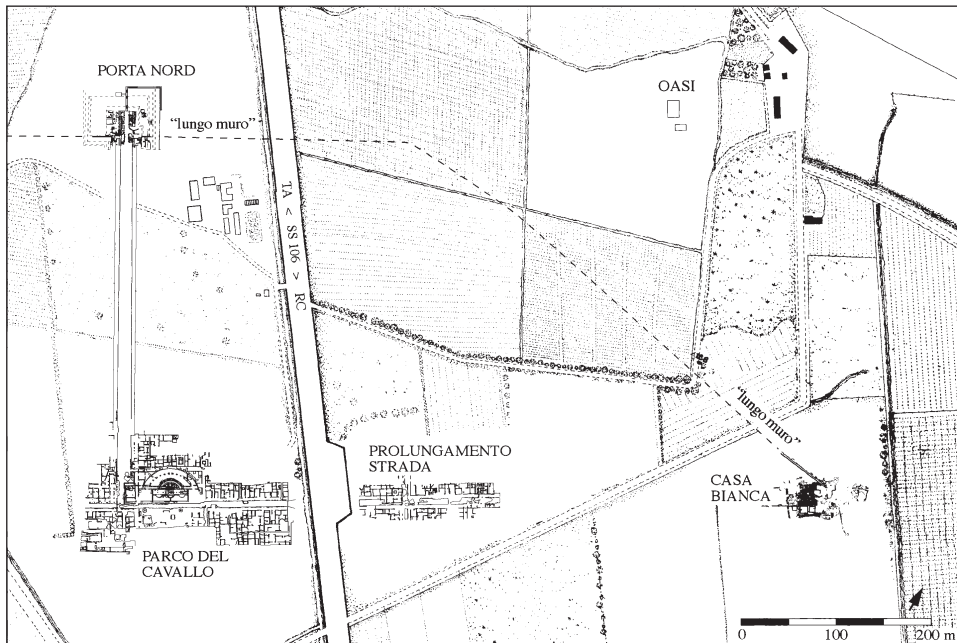


Figure 9.2 Plan of excavations at Porta Nord, Parco del Cavallo and Prolungamento Strada.

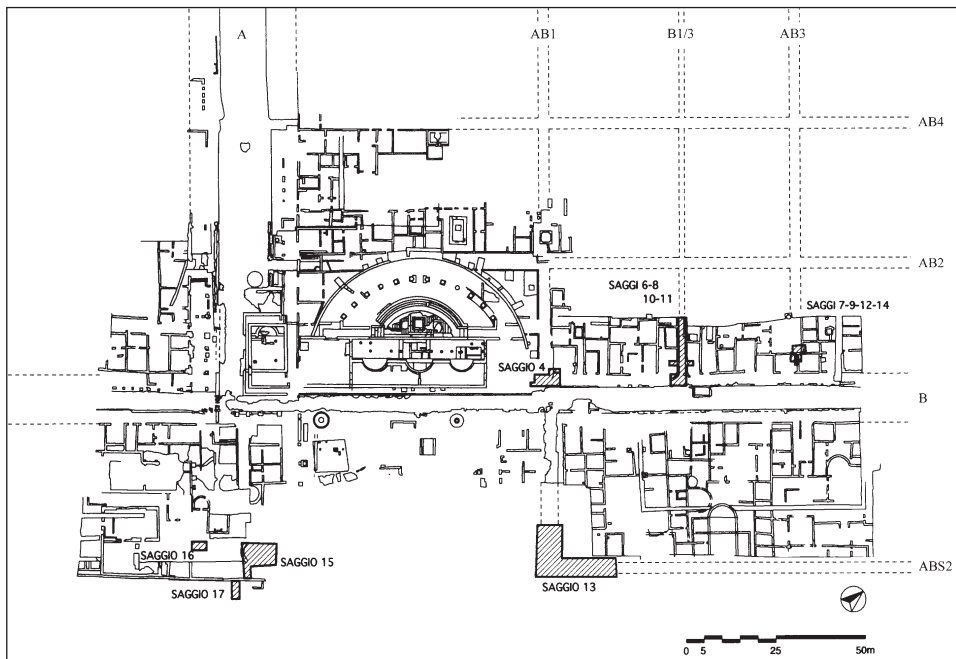


Figure 9.3 Excavations at Parco del Cavallo.

one of the main axes of the earlier city – although the *plateia* of the Classical period is much wider. This datum must so far be regarded as preliminary; the issue will be explored further in future excavation campaigns (Greco *et al.* 1999).

Equally, as early as 1971 and 1973, F. Castagnoli (1971; 1973) used the first results of the excavation to argue that the Roman city of Copiae, to which the great majority of buildings brought to light so far belongs, maintained the urban plan of Thourioi, aside from a few major alterations. In other words, Copiae, the Latin colony, is simply the Thourioi of the Roman period (indeed, the name of Thourioi must have been preferred, even in late antiquity, to the official name of the Latin colony, Copiae).

Aside from some alterations of the original plan carried out after its foundation, we can assume that the layout of the Latin colony essentially coincided with that of Thourioi, on the evidence of numerous soundings carried out over the last few years, which show that the paved streets of the Roman period overlies the beaten-earth *plateiai* and *plateai stenopoi* of the Classical period.

Observations on the urban layout

A large north-south *plateia* (A), 29.50m (100 Roman feet) wide, runs through the Parco del Cavallo and Porta Nord areas (Fig. 9.4). This street intersects an east-west *plateia* (B) (Parco del Cavallo and Prolungamento Strada areas), 14.60m (50 Roman feet) wide. 296m (1000 Roman feet) east of this intersection, in the Prolungamento Strada area, *plateia* B intersects a third north-south *plateia* (C), 12.50m (40 Roman feet) wide. North of here, a few years ago I discovered *plateia* D under the wall of the Roman city. This street runs from east to west, and is hence parallel to B. It was not possible to ascertain its length. This excavation was conducted in the framework of a research program of the Superintendency of Calabria coordinated by the Director of the Sybaris Excavations, Dr. S. Luppino. As part of the same research program, we recently (1998–2000) located a new north-south *plateia* (E, parallel to A and C), 296m east of *plateia* C. Although we were not able to explore it completely, we found and excavated its crossing with *plateia* D, which is certainly over 20m wide. We brought to light a 22m stretch of the street, but were not able to complete its exploration, due to the well-known difficulties of digging at Sybaris, where the presence of underground water requires the use of costly well-points (Greco *et al.* 1999).

In conclusion, so far we have evidence for five of the seven *plateiai* mentioned by Diodorus; in addition we can reconstruct the plan of at least one of the six large squares formed by their intersection (four in one direction, three in the other). The distance between *plateiai* A and C, as we mentioned above, is of 1000 feet, that between B and D of 1300 feet; this was, hence, the size of at least one of the squares. As early as the 1970's, the excavation along *plateia* A revealed *stenopoi* about 3m wide (10 Roman feet), placed at an average distance of 37m apart (though this distance varies slightly), and all perpendicular (east-west) to *plateia* A (north-south) (Greco *et al.* 1999). Our recent soundings (Greco *et al.* 1999) also brought to light north-south *stenopoi* along *plateia* B, which runs from east to west. These lie about 74m from one another. This would seem to indicate that the grid of *stenopoi* divided the

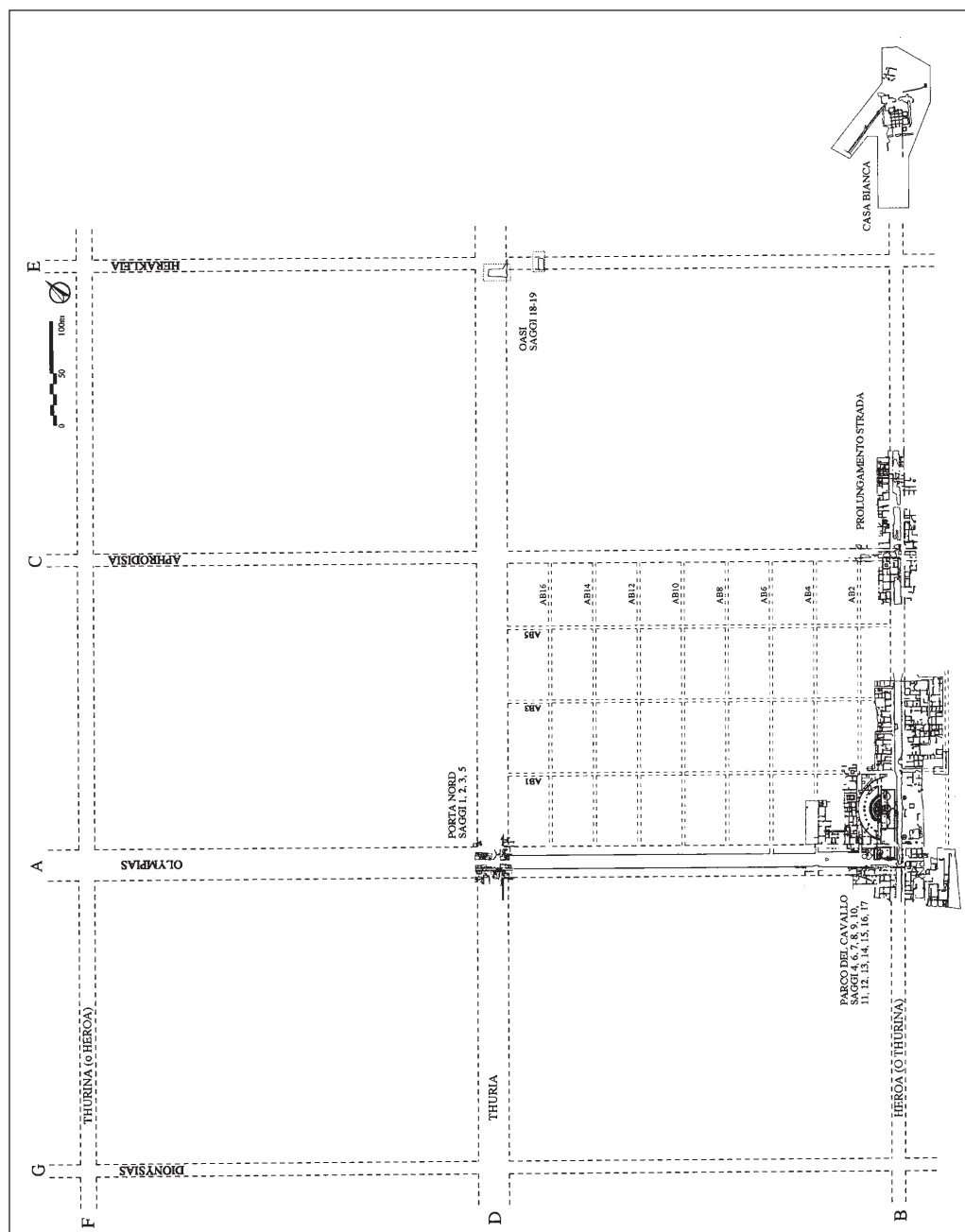


Figure 9.4 Reconstruction of the urban layout of Thourioi.

town plan into 74 by 37m rectangles, just as Diodorus says. However, it should be observed that, at least in one case, the long side (74m) of this rectangle is divided into two equal parts (37m) by an *ambitus* with a sewer just slightly over 1.50m wide. Hence, we must envisage the possibility – for the present, only as a working hypothesis requiring further verification – that the 396 by 296m (1300 by 1000 Roman feet) grid was actually divided into 37 by 37m squares. Such a square could accommodate four 18 by 8m houses separated by a 1m thick wall, an arrangement attested in many coeval sites such as Olynthus and Himera, but not so far at Thourioi itself. Further investigations of the layers under the Roman and late ancient houses will be needed to verify this hypothesis.

Street names

Let us return to the seven large *plateiai* mentioned by Diodorus Siculus, and attempt to identify them with those brought to light so far (Fig. 9.4). I would like to begin with this preliminary observation: I think that, to interpret his text, we need a guide-fossil. As we have seen, the east-west *plateiai* are 1300 Roman feet apart, the north-south ones 1000 Roman feet. Diodorus says that four ran lengthwise and three breadthwise. If we assume that there were four east-west *plateiai* and three north-south ones, we obtain an unlikely long and narrow plan. It seems obvious to me that the higher number (four) refers to the *plateiai* running closer to one another (1000 Roman feet), and the lower number (three) to those placed further apart (1300 Roman feet). The result is a nearly square shape, with four *plateiai* running from north to south, and three from east to west.

This hypothesis finds further support in the street names mentioned by Diodorus. If, following his order, we begin with the *Herakleia*, the first street he mentions, this must necessarily be the easternmost of the north-south streets, because, as is well-known, the *Herakleia* is always a coastal street. For example, the *hodòs Herakleia* mentioned in the *Herakleia* table (which carries a *syntheka* of the land of *Athena Polias*) was the street running parallel to the sea between the city of *Herakleia* and the sea itself. Thus, the *Herakleia* (*hodòs*) of *Thurii* was nothing but the urban stretch of a very ancient road which ran along the Ionian coasts of present-day Lucania and Calabria.

Having identified the *Herakleia* with the easternmost of the north-south *plateiai* (corresponding to our *plateia* E), C must be the *Aphrodisias* and A, the widest of all (100 Roman feet), the *Olympias*. As to the *Dionysias*, since east of *plateia* E there was the sea, it can only lie west of A, towards the *chora*, a position well suited to a street called *Dionysias*. Thus, the street nomenclature of *Thurii* placed *Herakles* on the east side, near the sea, and *Dionysos* on the west side, towards the countryside. Zeus ruled in the middle, in the large 100-foot-wide street, with *Aphrodite* beside him (between the *Olympias* and the *Herakleia*). In earlier publications, I suggested that these streets could have been named after sanctuaries that they ran by (as the stele in the port of *Thasos* suggests) (Greco 1999). This working hypothesis still needs to be verified through excavations, first and foremost that of a large building with a monumental *propylon* lying east of the *Herakleia*, for which I proposed an identification as a sanctuary of *Herakles*.

It is not as easy, however, to assign the names of each of the three east-west *plateiai* (*Heroa*, *Thuria* and *Thurina*). However, whether we read Diodorus' text from north to south, or from south to north, the *Thuria* is the one that lies in the middle of the system. The name is indubitably derived from the fountain after which the city itself was named, which was presumably transformed into a cult place. *Heroa* could be the street skirting the *agora*, where heroic monuments were usually erected. If this were true, the most likely candidate for it would be *plateia* B, which runs between the theatre and the *thermae*. Our soundings indicate that this was the area of the *forum* of Copiae and, very probably, of at least one *agora* of Thourioi. The *Thurina* (possibly named, as often happens, after the area that the street leads to) could be the *plateia* presumably running north of D, which we have not found yet. It must have led out to the *chora*, the *ager thurinus*.

Conclusions

At this point, I would like to propose a more general reflection on two issues. First of all, the foregoing considerations bear witness to the new perspectives one can open (far be it from me to claim that my results are definitive) by combining literary, epigraphic and archaeological data – albeit with caution and avoiding circular reasoning. Such an approach can, if nothing else, considerably broaden the perspective of researchers confronted with the problem of how to investigate an ancient town – a huge task, considering the modesty of our strength and means, and our too short life span. As Roland Martin (whom I had the fortune of having as my teacher) often said to me, archaeologists exploring ancient cities should strive to achieve great results through a few well-aimed excavations. Today, undertakings such as the excavation of Olynthus, for example, or the extensive excavations of Selinus, Naxos, Megara Hyblaea, Metapontum or Paestum, or even Sybaris itself, are no longer possible, because of their very high costs and the difficulties involved in the management of the archives of excavations conducted using modern methods. But one thing is certain: if today we can answer certain questions with just a few well-aimed soundings, we owe this to the much criticised extensive excavations of the past. For the future, however, I think we should reconsider our investigation strategies. Today, geophysical prospecting and aerial photography allow us to dispense with having to carry out extensive excavations before we can proceed to specific soundings to explore the stratigraphic history of ancient cities.

Finally, I would like to conclude with a few brief considerations on Hippodamus of Miletus, with whom I started. Again, I am sceptical of the possibility of understanding the essence of Hippodamus' theory on the basis of Aristotle's summary. Furthermore, scientific rigour demands that we use only those towns which tradition attributes to Hippodamus – *i.e.* Piraeus and Thourioi, certainly, and Rhodes, possibly (in my opinion, very probably) – as testimonies of his urban planning principles. To speak of Hippodamian town planning, influences, imitations, loans, and derivations in other contexts is, in my opinion, highly imprudent. Thourioi is especially important in this respect, considering the scarcity of evidence from Piraeus and Rhodes, which lie under the respective modern towns. The site was abandoned from late antiquity (seventh-eighth century AD) to the second half of the

twentieth century. At the end of the 1960's, the Italian state managed to thwart plans to turn it into an industrial area, assuming ownership of about 130 hectares and imposing a ban on construction over about 500 hectares. Thus, the Sybaris plain holds the promise of becoming an ideal field of research on urban history for future generations. The site is also the only town planned by Hippodamus whose investigation does not require the (impossible) demolition of modern buildings.

As to what the excavation has revealed so far, some considerations, although preliminary, are due on the city's urban plan – which incorporates new and unprecedented principles of regularity and symmetry, applied, as far as we can see, with maniacal precision – and the appearance of the grid plan, possibly for the first time in the history of Greek towns. One should keep distinct, however, Hippodamus the theorist from Hippodamus the builder of Thourioi. The city's plan cannot have been the creation of a single architect; rather, it resulted from his interaction with the community which commissioned the job to him.

It seems clear to me that Hippodamus' *Politeia* must have included a chapter on his town-planning theory; indeed, he was possibly the first architect to propose such theories. This gave rise to the adjective 'Hippodamian', which is, however, more popular with modern than with ancient writers. However, even if we had the complete version of the text, this would not authorise us to see the plans of actual towns as mere applications of his theories: in laying out a city, architects must inevitably take account of the needs and demands of the future inhabitants. Methods for the rational allocation of space and the meeting of hygienic and aesthetic requirements must have developed and spread over time, eventually giving rise to the typically Greek town plan (by its plan alone, Strabo (III,4,2) could characterise a town as Greek rather than Phoenician). But this is a far cry from attempting to posit a connection between urban plans and political regimes, although some enterprising modern theorists see the grid-plan as a 'reflection of democratic egalitarianism'. As the regretted David Asheri (1975) said (*contra* Hoepfner and Schwandner 1994), 'Hippodamian' systems work with all political regimes. An example will help to justify this rather peremptory statement.

Modern scholars have always refused to attribute the planning of Rhodes to Hippodamus on the grounds that the 'democratic' Hippodamus, who worked for democratic Athens at Piraeus and Thourioi, could not possibly have stooped to collaborating with the Spartans at Rhodes. Incredible as it may seem, this view ultimately goes back to a typically American school of thought of the 1930's which (*ex gr.* Mumford) identified the Athenians with the USA and the Spartans with the Nazis. To shed light on this matter, we should readmit as evidence the fragments by a Hippodamus in Stobaeus' *Anthology*, which German philology has dismissed as apocryphal (they are not included in Diels and Kranz's classical collection of the fragments of the Presocratic philosophers (Diels and Kranz 1951–52)). Their author, who can hardly be pigeonholed as an exponent of 'democratic' thinking, at a first reading does not seem so far removed from our Hippodamus.

There are five of these fragments, all in Stobaeus' fourth book. Four are from the *Peri Politeias* by Hippodamus Pythagoricus (Stob. 4.1.93–5, pp. 28–36 Hense; 4.34.71, p. 846 Hense), another from the *Peri Eudaimonias* by Hippodamus of Thourioi (4.39.26, p. 908

Hense). Obviously, I do not intend to argue that they are Hippodamian 'originals'. It has been demonstrated that these texts were collected in the Hellenistic period by Western Pythagorean circles and rewritten in the Doric dialect to cloak them in an aura of archaism (Thesleff 1972). But, although caution must be used, it is remarkable that these fragments refer to the community and city of a Pythagorean or Thurian Hippodamus. It is unlikely that the name of Hippodamus, who was not especially renowned in antiquity, was used as a pseudonym to lend authority to the texts; hence, these must be excerpts compiled in Hellenistic times by Neopythagoreans who seem to have, so to speak, incorporated Hippodamus into a Pythagorean tradition.

The fragments state that: a) society is exactly like a lyre, and hence the order and harmony it needs are of a musical nature; b) the Sophists (Protagoras?) are corrupters of souls who deny the existence of God; c) the education of young men must be promoted by organising phratries – associations at once military and political whose members take their meals together (the model is Sparta); d) the ideal state is the Tripoliticon (a combination of monarchy, oligarchy and democracy; this regime was already theorised in the fifth century, and in this case, too, the Spartan state is the model); and the author violently attacks the mass as troublesome and immoderate.

Finally, a possible explanation of the connection between Hippodamus and Rhodes can be sought in the story of an outstanding personage, the noble Dorieus of Rhodes, son of Diagoras, one of the greatest athletes in Greek history (Paus.VI,7). Sentenced to death by the Athenians, Dorieus fled to Thourioi, in the years when the city had undergone an oligarchic 'involution' and repudiated its mother town, Athens. Dorieus fought alongside the Spartans with 10 Thurian ships armed at his expense in 412–11 BC. Three years later (408 BC), the city of Rhodes was founded. It was planned, according to Strabo, by the same architect who planned Piraeus, whom we can call Hippodamus of Thourioi.

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10 Domestic Façades: a ‘Feature’ of the Urban Landscape of Greek Poleis?

Lisa Nevett

Introduction

Between the ‘Dark Age’ and Archaic periods Greek settlements were transformed: not only did they grow much larger, but also there were profound changes in the individual buildings and in the way in which those buildings were organised in relation to each other (see, for instance, Lang 1996, *passim*). Structures became functionally specialised, so that by the Classical period the differentiation of civic and religious buildings was a fundamental aspect of the Greek ‘urban’ landscape. A variety of distinguishing features were used, including monumental scale, prominent location, distinctive and durable materials, and architectural elaboration in the form of sculpture, mouldings, columns and painted motifs. The adoption of such devices fits with cross-cultural observations about the built environment, in which architectural features have been seen as operating as visual ‘cues’ transmitting information to the enculturated viewer (see, for example, Rapoport 1982, 155).

Although the façades of a variety of forms of civic and religious architecture have been well-studied, less attention has been paid to the way in which private, domestic buildings may have contributed to the streetscape of Greek cities: the aim of this paper is to explore to what extent, and in what ways, the potential of building façades as a means of communication may have been exploited in the numerous private houses which must have formed the majority of the built environment in most classical *poleis*. I argue that a close examination of the surviving remains of houses reveals evidence that domestic exteriors were sometimes consciously manipulated, incorporating a variety of visual ‘cues’ in order to convey messages about the status and lifestyle of their inhabitants. In what follows I highlight several different strategies which seem to have been adopted, and suggest some ways in which those strategies may have functioned in the broader cultural context. My discussion is supported by evidence from selected houses in three different cities: Classical Olynthos and Halieis, and Hellenistic to Early Roman Delos. Rather than offering a comprehensive over-view, these examples are intended to be illustrative, opening up the topic for further investigation.

Throughout antiquity the majority of Greek houses were constructed with a stone footing and a superstructure of unfired mudbricks which were held together with a clay mortar. At most sites only the stone socle survives *in situ* and it is therefore difficult to say much about the architecture of the houses above the first few centimetres. A rare instance



Figure 10.1 Façade of house 1 at Ammotopos.

of a Greek house with walls preserved to a significant height is house 1 at Ammotopos, Epirus, constructed during the late fourth or early third century (Dakaris 1986; 1989, 41–9; Hoepfner 1999, 384–411). Because of its stone superstructure, the entire lower storey survives to a height of over two metres, above the height of beam holes which must have supported an upper floor. From the exterior, the Ammotopos house seems to present a plain, almost forbidding, aspect (Fig. 10.1): the masonry itself is relatively roughly shaped with no evidence of mouldings or other decorative elements. The only major feature of the façade is a single street entrance which is modest in scale and located inconspicuously on one corner. Instead of windows the house has only small, high openings in the walls which probably helped more with ventilation than with lighting. The main source of light for the rooms seems to have been an unroofed interior courtyard which gave access to a cooking space, a storage area, and a large living room (Fig. 10.2). The courtyard was reached from the street via a dog-leg passage which would have prevented passers-by from seeing into the house even when the outside door was open.

Less well-preserved evidence from other sites of this period suggests that the interior courtyard and screened street entrance of the Ammotopos structure were common features of Classical Greek houses and that such measures were deliberately used to separate the interior world of the house from the street outside (for discussion see Nevett 1999, esp. 72–3). In other respects, however, the building is perhaps less representative: the organisation of the interior makes a large 'hearth-room' the main circulation space, rather than the courtyard,

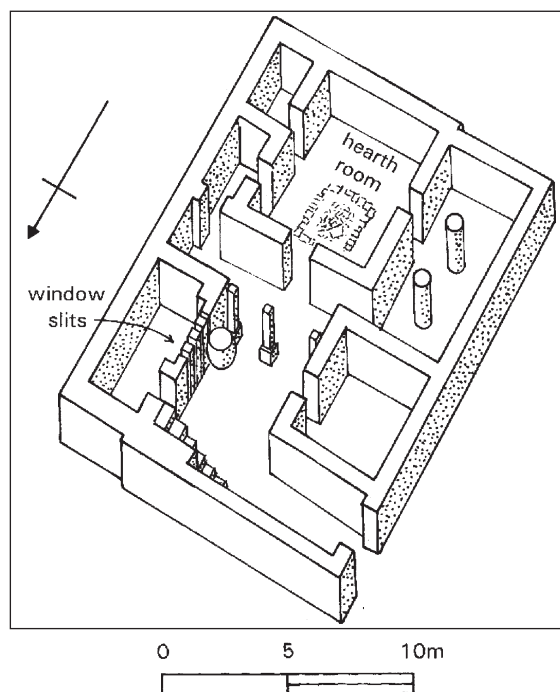


Figure 10.2 Isometric reconstruction of house 1 at Ammotopos (after Nevett 1999, 25 fig. 4).

which more commonly performed this role elsewhere. The settlement is located on the fringes of the Greek world, and it is therefore unsurprising that the house differs from those found in other Greek settlements. The apparent lack of decoration on the façade of the Ammotopos house may be similarly unrepresentative of Greek houses of this period in general.

Olynthos and Halieis: house façades during the Classical period

As at Ammotopos, a single street entrance is the major surviving feature of façades at some sites, but in other cases there is evidence that an effort was sometimes made to elaborate that entrance. One strategy, exemplified by some of the houses at Olynthos and also found in numerous other cities, was to frame the door with a *prothyron* or recessed porch. This would have created a more private entryway by

off-setting the door from the wider streetscape, but at the same time it would also have emphasised the location of the entrance and distinguished it from the remainder of the house façade. In many instances a narrow pedestrian door was paired with, or even replaced by, a wider opening designed to give access to the interior court for wheeled vehicles. Such a double entryway would have accommodated bulk transportation of goods, particularly agricultural produce. It may therefore have given an indication that the household was wealthy enough to afford animals and carts, and may have shown that the scale of production in which the inhabitants were involved was such as to necessitate their use. The presence of wheel ruts in some of the double thresholds (for example Olynthos house AXI 10: Robinson and Graham 1938, 128 and Plate 69) indicates that, in some cases at least, wheeled vehicles were actually brought into the court.

In the recent past in Greece mudbrick walls have commonly been coated with lime plaster to keep moisture away from the unfired bricks, aiding preservation. The exteriors of the ancient houses may also have been routinely coated for the same reason (for example, at Olynthos a clay coating may have been used: Robinson and Graham 1938, 291; while at Morgantina traces of a plaster coating were noted during excavation: Tsakirgis pers. comm.). It seems likely, however, that as with traditional mudbrick housing today, the shapes of the

stones making up the socle would have been visible through the coating. In some cases evidence of variation in the construction of the socle within a single house suggests that the masonry itself would have been used in order to indicate what was in the interior of the house, and hence to allude indirectly to the urbanity of the house-owner. At Olynthos the socles of the majority of internal and external walls of the excavated buildings are of rubble and mortar construction (Robinson and Graham 1938, 223). On occasion dressed blocks are also present, which are interpreted by the excavators as having been re-used from earlier structures and included simply to provide a firm foundation for the superstructure (*ibid.*, 223–4). Nevertheless, the specific locations in which they were found creates the impression of more deliberate placing. In communal buildings such as the *stoa*, fountain house and shops, ashlar blocks are incorporated into the façades, as in the shops on the façade of house AIV9 (Robinson and Graham 1938, 212 with further references), but they are noticeably absent from the side and rear walls, suggesting that they were intended as a conscious enhancement of the façade. Cut blocks are also used in some houses, and again, they tend to be placed only in particular positions where they would have been prominently on display either to visitors or to passers-by in the street. The most frequent use is in the court, where neat limestone blocks frequently form the bases for the colonnade of the pastas, presumably supporting wooden columns (Robinson and Graham 1938, 239–41). Painted limestone mouldings are occasionally also used in the court, as in house AVIII 8 (Robinson 1946, 42–4). Large, finely-worked masonry blocks also tend to be used for the jambs of the street door (Robinson 1946, 250–1), and sometimes also for the socle of the rear wall of the *prothyron*, which would have been clearly on view from the street, screening the court from the entrance (for example in house AVIII 8, where finer limestone blocks form the end surface of the wall: Robinson 1946, 41 and Plate 26 and Plate 27.2).

In house AV 6 the use of masonry is carried onto the façade, which is supported on two courses of *opus rusticum* blocks, found *in situ* during excavation (Robinson and Graham 1938, 94 and Plate 30.2). These blocks form the outer surface of a thicker wall which is of rubble construction on the interior. The excavators believed that the blocks were used to provide a sound foundation, and that some would have been below the original street level (Robinson and Graham 1938, 94). Nevertheless, little attention was paid to stratigraphy during excavation (Nevett 1999, 59–60; Cahill 2002, 62). The prominent location and decorative effect of the blocks in house AV6 make it hard to believe that they were not being used for display purposes, and this would fit with other elements which suggest that the house belonged to a wealthy family, including its large scale (it occupied an extra large plot at the expense of its neighbour: Robinson and Graham 1938, 92), and its location close to the *agora* where property prices were much higher (Nevett 2000; Cahill 2002, 278–81).

A similar, patterned use of masonry can be seen in the houses of the lower town at Halieis. Here the masonry socles for the walls are of local limestone, ranging between unworked rubble and finely worked blocks (Boyd and Rudolph 1978, 352). Closer observation shows that the ashlar tend to be in prominent positions, either on the façades of buildings, or in locations in the interior where they would be seen by visitors. Roughly fluted stone columns,



Figure 10.3 Large masonry blocks of the andron of house 7, Halieis.

once surfaced with plaster, adorned the court of house C (Boyd and Rudolph 1978, 350). More conspicuously positioned for viewing from the exterior are the worked blocks used on the façades of some houses: for example, a fine grey limestone block is used as an *anta* base for a recessed *prothyron* entrance to the same house (Boyd and Rudolph 1978, 349). More impressive in scale are monumental stone blocks used on the façades of some of the houses, most strikingly in house 7, where such slabs form the socle of the *andron* and anteroom (Ault 2005, 30) (Fig. 10.3). The slabs are carried round onto the façade of the *andron* and that of the anteroom, facing out into the court. At Halieis and elsewhere the *andron* is the most highly decorated interior space, featuring a carefully finished plaster floor and painted plaster walls (Ault 2005, 168–71), which suggest that this was a reception space. The large scale of these blocks is in keeping with these decorative features and must have drawn attention to this part of the house from both the street and the court. It seems likely that by possessing an *andron*, a householder was not only giving himself (and perhaps also his family) a more elaborate setting for social occasions than was available elsewhere in the house, but also he was indicating his wealth, status and urbanity, since he could afford to have such a room, had need of it to entertain, and had the good taste to furnish it. Therefore, by signalling possession of an *andron* on the exterior of his house, the owner could demonstrate these qualities to anyone standing in the street. At the same time, the use of these blocks would also have provided an impressive aspect to visitors entering the court and may have helped to guide them towards the area where they were to be entertained.

Taking the evidence from Olynthos and Halieis together, a pattern starts to emerge: neat masonry is used to enhance the appearance of a house. It appears particularly in areas where it might be seen by visitors, such as the courtyard and *andron*, and is used on façades where it could be observed by passers-by in the street. Dressed stone blocks are used to

emphasise the façades and doorways of houses, and at Halieis they can also indicate the presence and location of an *andron*.

The houses at Olynthos and Halieis are roughly contemporary with each other, dating to the early fourth century BCE, and suggest the use of similar strategies for making individual houses stand out against the wider streetscape of the *asty*, and for making statements about the status of their owners. At Delos, where the stone construction of the houses means that they are exceptionally well preserved, some of the same strategies can be observed, but it is also possible to see additional ways in which the exteriors of houses were manipulated. Here the multi-ethnic character of the settlement and the somewhat later date of these structures (in their present form, most date from the second century BCE onwards) raise additional questions about how the exterior decoration of house façades functioned in the broader social and cultural context.

Hellenistic to Early Roman Delos

The well-preserved masonry superstructures of many of the houses at Delos display some of the same decorative use of stonework as observed at Olynthos and Halieis, and it seems that here, too, domestic façades were used deliberately by the owners of the larger properties as an element of display, perhaps in a competitive manner (compare Trümper 1998, 30–3). In this case not only the stone socle, but also the masonry superstructure of a house façade sometimes seems to have been used to enhance the appearance of the house: for example, on the south side of the Inopos house a façade of finely-worked marble ashlar contrasts with the majority of Delian domestic architecture, in which the walls generally consist of smaller granite and gneiss blocks (Chamonard 1922, 234–41). This marble façade seemingly pre-dates the rest of the house, and it may be that the blocks were deliberately preserved as a means of achieving prestige (Trümper 1998, 34, 241). Additional strategies were also sometimes used to enhance the entire façade: for example, in some cases, such as on the south side of the 'House of the Dolphin', a colonnade draws attention to the house from the neighbouring public square (Chamonard 1922, 104 and Plate XXIV; compare Trümper 1998, 32).

As at Olynthos and Halieis, the street entrance was often made to stand out as an impressive and monumental feature at Delos. Recessed *prothyra* are not found, but other strategies were used: for example, in the case of the Inopos house a flight of steps leads up to the door, which is raised above street level (Bruneau 1973, 125–6) making the door itself more imposing (compare Trümper 1998, 32) and perhaps inviting comparison with public architecture. As in many Delian houses, the door frame is made of large marble slabs. In addition to catching the eye through their design and use of materials, house doorways are often placed in prominent locations, again suggesting a deliberate attempt to attract attention: for example the street door of the well-known house of Kleopatra and Dioscorides (house I, insula III, Theatre Quarter) is located at the end of a narrow street, drawing the eye of anyone approaching. The entrances to some houses attract the gaze because of the views they offer into the interior. Again, the house of Kleopatra and



Figure 10.4 View through the street door of the house of Kleopatra and Dioscorides, Delos.

Dioscorides demonstrates this feature: a vista into the house is created through the street door by the placement of sculpture in a niche immediately opposite (Kreeb 1988, 18–21) (Fig. 10.4).

The façades of the Delian houses were also enhanced in a variety of other ways. Stone relief decoration has sometimes been found on blocks incorporated into house walls or fallen in positions suggesting they were displayed there (Bruneau 1970, 643). The most common motif is a sculpted phallus (Marcadé 1973, 331), found *in situ* on blocks built into the exterior walls of a number of houses including the ‘Maison du lac’ (Chamonard 1922, 418) (Fig. 10.5). Other symbols include the image of Herakles, and/or simply his club (Bruneau 1964; 1970, 404–5; Marcadé 1973, 336–41). Crossing the threshold seems to have been a symbolic act and these reliefs were sometimes placed close to the street door. This location was also frequently marked by altars of varying shapes and sizes (Bezerra de Meneses and Sarian 1973, 80). Outside the ‘House of the Dolphin’, for example, two cylindrical white marble altars stood beside the main doorway (Chamonard 1922, 404), while outside house C, insula I in the Stadium quarter, a rectangular plastered stone altar and bench were also located to the right of the doorway (Plassart 1916, 175–94) (Fig. 10.6).



Figure 10.5 Phallus carved in relief on the exterior of the *maison du lac*, Delos.

Although the superstructures of most of these houses appear to have been stone, at least to the top of the lower storey, there is still clear evidence for the use of stucco on the outside of at least some external walls, covering the stone façades (Chamonard 1922, 104–6). At the time of excavation, the south wall of the Diadumenos house incorporated a partially preserved plaster surface which included the remains of two feet, probably originally part of a footed phallos image. The feet were moulded into the plaster over one of the flat granite blocks of the façade (Chamonard 1922, 106, with fig. 47; Deonna 1938, 879, with Plate XCIX), so that it seems that the plaster itself was being used to mimic the effect of more elaborate and expensive decorative stone features.

At this house there was no evidence of any accompanying painted decoration, but such decoration was found outside a number of other Delian houses at the time of excavation. The themes of the paintings are almost exclusively related to cult. For instance, preliminary reports and archive photographs of two neighbouring properties in the stadium quarter (houses C and D of insula I) show that in both cases altars beside the street door, together with the flanking walls, were painted with a variety of different motifs in successive layers of paint (Plassart 1916, 175–228 with Plates V–VII). The images visible on house C at the time of excavation, which comprised parts of several different phases of repainting, included Herakles with club and lion skin, a cockerel, an amphora, and on the altar itself, a sacrifice scene, and scenes of wrestlers and boxers. The paintings on the second house were less well-preserved, but included musicians, further sacrifice scenes and a figure of Pan. Like other religious paintings from comparable locations, these images may be an allusion to the festival of the *compitalia* (Plassart 1916, 185; Bruneau 1970, 598).

The extent to which the occupants of the houses would have been responsible for, or

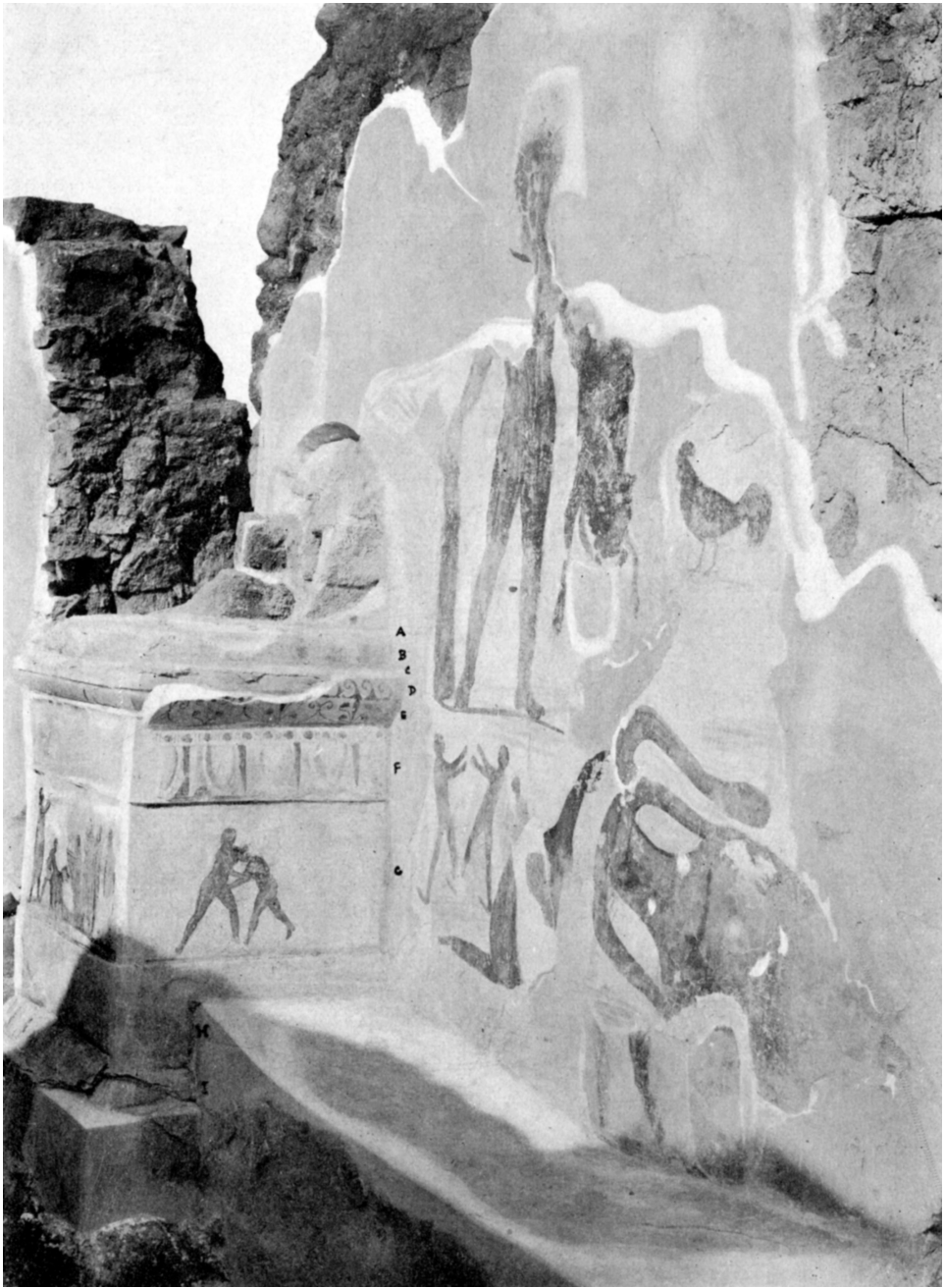


Figure 10.6 Altar and paintings outside insula I, house C in the Stadium Quarter, Delos (after Plassart 1916, fig. 10).

at least involved in, the decoration of the exterior in this way is unclear. Some aspects of the imagery suggest that the paintings can be connected with the interior of the house and with its occupants, rather than with the public space of the street (compare Bezerra de Meneses and Sarian 1973, 108): the image of Herakles may represent part of a Greek tradition in which the hero appears as protector of the house (Bruneau 1970, 406–7) and might play a similar role to the apotropaic reliefs mentioned above (Marcadé 1973, 339). The exterior paintings have also been seen as constituting part of a larger ensemble which includes wall paintings in the interior of the house as well, again implying that the owner is responsible for them (Bezerra de Meneses and Sarian 1973, 107). An argument has been made that the owners of the houses outside which these paintings appear were the organisers of the festival of the *compitalia*, and in at least one case this is supported by epigraphic evidence (Bruneau 1970, 613). In most cases little is known about the owners themselves. Although inscriptions naming individuals do survive in a few instances, these are open to more than one interpretation. For instance, in house C, insula I in the Stadium Quarter (discussed above), a bilingual inscription in Latin and Greek, set up by freedmen in honour of their patron Q. Tullius, has been interpreted both as honouring the owner of the house (Bruneau 1970, 613), and as having been set up by the freedmen occupants of the house in honour of a patron who resided elsewhere (Rauh 1993, 200).

An alternative view sees the figures such as Herakles appearing not as protectors of the household but as depictions of particular gods worshipped during the *compitalia* by individual groups of celebrants. Furthermore, the figures often seem to have been painted using similar techniques to, and at the same time as, the images on the altars (Bruneau 1970, 612). This might imply that the painted figures played a different role from their sculpted counterparts, and were more comparable to modern posters or graffiti, rather than being closely related to the occupants of the house itself. In the latter case they would constitute a different way of using domestic exteriors from those observed above, namely as a canvas against which to display messages relating to the wider community.

Whether or not the paintings are specifically related to the owners of the houses on which they appear, both the paintings and the sculpted imagery found at Delos carry a variety of implications about the cultural mix of the community. During the period when the houses were probably occupied (the second and first centuries BCE) the indigenous inhabitants had been expelled and the island became a free port, home to a wide range of individuals with different backgrounds, from Italy as well as from Athens and the eastern Mediterranean. The issue of cultural affiliations seems to be being played out explicitly in these images: the painted figures are frequently clean-shaven and dressed in togas. In some examples Latin graffiti or dipinti also appear. While these various elements, and the festival of the *compitalia* itself, suggest an Italian connection, other aspects indicate Greek influence: the series of paintings also bears a dipinto with the name ΠΑΡΜ[Ε]Ν[ΙΩΝ], and, as noted above, Herakles is traditionally associated with Greek domestic cult (Bruneau 1970, 406). This Greek element might be linked with the fact that the celebrants of the *compitalia* were often slaves of Greek origin (Bezerra de Meneses 1973, 99), and also with epigraphic evidence which suggests that the *collegium* of the *competalistai* at Delos

(particularly associated with the celebration of the *compitalia*: Bruneau 1970, 617) stands out as deliberately trying to establish and maintain a Greek identity, in contrast with the other *collegia* on the island (Adams 2002, 114). A further possible source of Greek cultural influence is also suggested by epigraphic material, which shows that some of the Delian traders came from Greek-speaking communities in southern Italy (Bruneau 1968, 665–6; Adams 2002, 104–5). The imagery of the painted decoration on the façades of these houses therefore seems to have a mixed heritage, suggesting that alongside their ostensibly religious purpose, such paintings may also have been used to assert actively the cultural identity and affiliations of particular groups within the population of Delos.

It remains unclear whether the exterior painted decoration found here is an innovation in the Greek context, or whether some form of painted decoration was already being used on domestic buildings in Greek cities. Although, as we have seen, evidence of the superstructure of such houses rarely survives, the mudbrick construction of the houses at Olynthos, Halieis and elsewhere may well have meant that such buildings made use of an exterior coating as protection from the elements, and this would have been tempting as a base for some form of painted decoration. Such a practice would parallel the colourful painted decoration which we know was traditionally used as part of the decorative scheme on Classical public buildings (Brinkmann and Koch-Brinkmann 2003; Brinkmann *et al.* 2004), and would be in keeping with the evidence outlined above for the use of house façades for display purposes.

Conclusion: the broader cultural context: housing and the streets in Greek cities between the fourth and first centuries BCE

Together, the evidence from Olynthos, Halieis and Delos suggests a range of different ways in which house façades may actively have been used to convey information about the interior of a house and its inhabitants and about group membership in the wider civic context. Although this evidence is indicative rather than comprehensive, the features identified and the interpretation suggested here are in keeping with conclusions already being drawn about the role of domestic architecture in the context of Greek *poleis* more generally. In recent years it has become clear that through the Classical and Hellenistic periods there was an increase in the decoration of domestic interiors and in the use of the house as a whole as a symbol. One aspect of this is the increasing importance being placed on the size and location of houses, which have already been seen implicitly as broad indications of the power and prestige of their owners in specific contexts: for example, the house of Dionysos and the house of the rape of Helen at Pella have been interpreted as homes for the companions of the Macedonian monarch (Makaronas and Giouri 1989, 10). Their scale – they cover more than ten times the area of a near-contemporary house excavated elsewhere at Pella – and location – near the city's *agora* – reinforce the impression of importance conveyed by their elaborate decoration and variety of mosaic rooms.

Concrete evidence of the value attached to the location of a house within a Classical *polis* is offered by a variety of sale or lease inscriptions relating to urban houses at Olynthos:

here again, houses close to the *agora* can be seen to have been considerably more valuable in financial terms than those on the periphery, even though the regular street grid meant that plot sizes were relatively standardised throughout this part of the city, so that in most respects the houses themselves are likely to have been fairly comparable (Nevett 2000; Cahill 2002, 278–81). These same inscriptions seem to have been displayed on the exterior of the house facing the street, and it is possible that as well as fulfilling a functional role in demonstrating ownership and recording financial transactions for official purposes, naming the owner of an expensive property may also have brought him prestige (Nevett 2000).

Additional aspects of the domestic architecture at various sites suggest that houses were used for display in a neighbourhood context. For example, towers are incorporated into houses in Attic *deme* centres including Thorikos and Ano Voula: amongst a jumble of more-or-less orthogonal, often single-storey, buildings, a substantial circular tower must have formed a conspicuous feature of the urban landscape, and the ability to construct such a building, together with the presumed need to have one either for bulk storage or for securing valuables, might be considered as a claim to wealth on the part of the householder (Nevett 2005).

Taken together, these general aspects of the house – its location, scale and the overall form of the superstructure – constitute a broader context for the operation of the individual visual cues on house façades discussed here. When viewed as part of a whole, these different aspects suggest that, rather than offering an anonymous backdrop for the elaborate civic and religious buildings of the *polis*, individual houses were significant components of the wider 'urban' landscape. It seems likely that, in addition to interior decoration, house façades were also a forum for competition between different households and were a means of conveying information about the wealth, status and identity of their occupants.

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11 Space and Identity in Hellenistic Beirut

Nadine Boksmati

Introduction

Although serious efforts have been made to understand the so-called ‘Phoenicians’ and their material culture, they still conjure blurry images. The post-war excavation program launched in 1993 has provided a rare opportunity to unravel aspects of Beirut’s history, to move beyond static interpretations of the past and propose a new understanding of this specific ancient Near Eastern city and its people.

This brief outline is part of a wider research project investigating ‘Space and Identity in Hellenistic Beirut’. Previous studies investigating the Hellenistic period in Phoenicia have argued for a dramatic and abrupt ‘Hellenisation’ of the land and its people in the third to second centuries BC. The urban development in Phoenician cities is often conceived as being a direct result of Seleucid policy, and the inhabitants are portrayed as Hellenised, largely forgetting about their local identity. This paper argues that such interpretations obscure the local developments and continuities within the city. The present analysis stresses the social dimensions of space and its role in mediating and structuring social relations. The interplay of people and their urban space is explored through a critical analysis of material culture, and is concerned with the way the inhabitants organised their spatial and material environments and the implications for their individual and collective identities. Incorporating the Iron Age background, this research considers the rather static discourses regarding the ‘Hellenisation’ of Near Eastern cities. The spatial organisation of Beirut was culturally specific, *i.e.* was largely a product of the Berytian society, and in spite of some modifications to the urban layout and the adoption of new material culture, the local structure in Beirut was not drastically affected in the Hellenistic period. The city reveals an integrated urban framework that was articulated by commerce and religion. Its distinctive identity was due to its long-standing trading traditions: the blurring of domestic with commercial and artisanal activities, and the multi-ethnic mix of people thronging, and trading in, the city.

Methodology

To date, 163 sites have been excavated in the Beirut Central District, exposing a significant amount of archaeological remains ranging from the Bronze Age to the Ottoman period

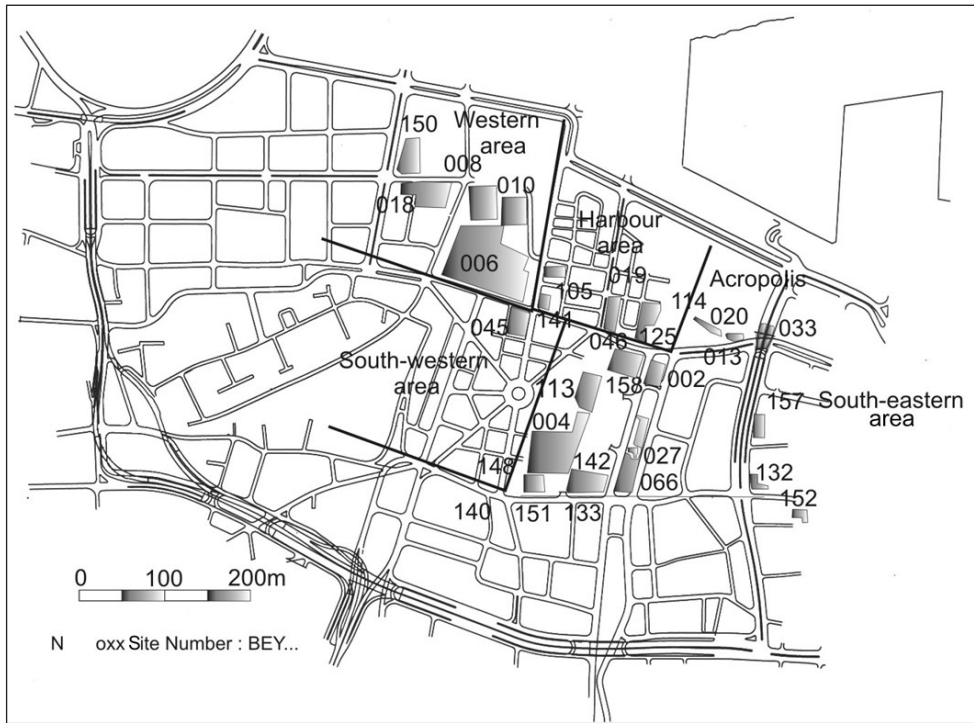


Figure 11.1 Map of Beirut Central District showing the five analytical areas and some selected sites.

(cf. Sader 1997; 1999; Curvers and Stuart 2002; Perring 2003). If one takes the stance that material culture is produced in social contexts, the interpretation of archaeological assemblages has great potential for indicating past social relationships and signalling various aspects of identities. However, a critical interpretation is only possible through a contextual approach *i.e.* by analysing material retrieved from different contexts across the city and examining their relationships. On this basis, I have undertaken an intra-site approach to the examination of space in Beirut, selecting varied assemblages from different areas across the settlement and studying their relationships.

At a broad level, Beirut's cityscape has been divided into five areas: the acropolis area, the harbour area, the western area, the south-western area and the south-eastern area (Fig. 11.1). These spaces, which are mainly determined by the topography of the site, as well as by the modern street network, constitute the framework of the intra-site analysis. The differential distribution of material culture in varied contexts allowed the identification of activity areas such as commercial, industrial, artisanal, religious and residential, which reflected complex micro-scale relationships across the city. The analysis of these different contexts and their relationships has provided a detailed insight into the consumption patterns in Beirut – consumption of space as well as material culture.

Reconstructing Hellenistic Beirut

Beirut's strategic location for trade laid the foundation for a long urban and mercantile tradition. Already in the first millennium, and along with its sister Phoenician cities, Beirut became part of an intricate trade network in the Mediterranean basin. The earliest settlement in Beirut developed on an eastern promontory facing a sheltered natural bay. The settlement was confined to this hilltop throughout the Bronze and early Iron Ages (Sader 1999, 30; Perring 2003, 196). As its wealth increased, the settlement extended south of the acropolis and in the harbour area. The settled area was delimited by a number of necropoleis which developed at the fringes of the residential area. By the end of the Iron Age, the western promontory was progressively settled (Curvers and Stuart 1997; 2002; Perring 2002; 2003). In the Hellenistic period, the settlement witnessed a considerable expansion. In this paper, I discuss the nature of three important spaces: the harbour area, the western area (the promontory overlooking the harbour), and the south-eastern area. I suggest that their spatial organisation in the Hellenistic period is culturally specific (*i.e.* a result of local agendas and traditions) rather than simply due to external influences.

The harbour area

The harbour area to the west of the acropolis constituted a key feature in the layout and a determining factor in the development of the settlement. The archaeological exploration in the harbour area has revealed a network of work installations and storage facilities (Curvers 2002, 57–8). Originally settled in the Iron Age, these working installations underwent several reconstructions and repairs but continued to be used without interruptions throughout the Hellenistic period. The structures developed as a result of their location next to the harbour and in accordance with the harbour's varied and busy activities. A number of the multi-roomed structures exposed in the close vicinity of the harbour (in Bey 105 and Bey 144) equipped with a series of ovens and plastered bins, have been interpreted as bakery installations (Curvers 2002, 64). The analysis of ceramic patterning from Bey 105 might also suggest the presence of a pottery workshop (personal observations). The harbour facilities equally housed some of the storage spaces of the city, as evidenced by the ubiquity of cubicles and silos (in Bey 105 and Bey 144) and working installations, and the composition of the ceramic assemblages – dominated by storage jars and utilitarian vessels – has confirmed the use of the harbour area generally as a working place incorporating warehouses and production areas. Therefore, the harbour area can be reconstructed as a bustling working place designated for the loading and unloading of goods shipped to and from the Mediterranean basin. The varied commodities would have been amassed in the harbour storages to be distributed later to other parts of the settlement.

In addition to its dominant working character, the harbour area also housed a religious structure. The evidence from Bey 019 and Bey 046 reveals an outstanding complex that was constructed during the second century BC on the site of an earlier functional building. The addition of rooms, the erection of a podium and the nature of the finds, which included

a dedication to the local goddess Astarté and a marble statuette portraying her Greek counterpart Aphrodite (cf. Sader 1998; Braakenburg-van Breuklen and Curvers 2000), suggest a public, religious function for this building. The use of a podium as a foundation for religious buildings is reminiscent of temple architecture in Iron Age Phoenicia and continues into the later Hellenistic and Roman periods in Lebanon (Dunand and Duru 1962, 22; Markoe 2000, 127). The presence of a religious structure in the midst of a busy working area demonstrates the close engagement between the religious and the working places in the city.

The western area

The western promontory constituted a landmark in the cityscape, given its imposing setting. This area witnessed major urban expansion during the Hellenistic period, perhaps as a result of its prominent location in proximity to the harbour, which was already in use during the Persian period, as is shown by the quay revealed by core sampling in Bey 039 (Christophe Morhange, unpublished report). Previously settled quarters were refurbished and open lands were progressively converted into cramped urban areas. An elaborate residential district (Bey 010) settled in the fifth century BC continued in use throughout the Hellenistic period. Previously, this area had been largely organised according to a grid-like pattern, incorporating multiple shops and living quarters separated by small alleys. In the course of the second century BC, a large part of the area was levelled and new structures were built using the previous architectural layout as a baseline (Elayi and Sayegh 2000, 124–5; Perring 2003, 203). Similarly, further south, the domestic quarter (Bey 006) dating to the fourth century BC was remodelled *circa* 150 BC. Houses associated with shops and workshops flanking small alleys were laid out according to a broadly orthogonal pattern (Perring 1996; 2002; 2003).

It is important to note that these refurbishments were paralleled by a further expansion beyond the western outskirts of the Hellenistic city (Bey 018, Bey 150). These quarters produced an abundance of finds attesting to the intricate trade connections and flourishing economic activity in which Beirut was engaged: as well as the large amounts of fine ware table-wares, the preponderance of storage vessels is significant. In addition to the elaborate residences, the western area encompassed a number of industrial structures that bordered the northern waterfront. The excavation of circular rock-cut pits and horizontal smooth rock-cut platforms in Bey 008 and Bey 018 gives evidence for activities relating to the processing of *murex* shells and hence purple dye manufacture. The location of these foul-smelling industrial installations, processing *murex* and dyeing textiles, took advantage of the prevailing western winds in Beirut to disperse the smoke and odours (Curvers 2002, 66–7).

A temple has also been revealed in Bey 010, facing the waterfront. Originally built in the fifth century BC, it was used continually in the following Hellenistic and Roman periods. The temple was remarkably distinguished from the surrounding residences given its elaborate architecture, its scale and its three access points (Elayi and Sayegh 2000, 153–4).

The south-eastern area

The south-eastern area of Beirut is a key area for the understanding of Beirut's layout and its underlying structure. This space constitutes an arena where different activities were entangled and various social relations were articulated. Excavations have yielded domestic architectural features incorporated into a system of insular units communicating with small streets (Bey 002, Bey 027, Bey 066 and Bey 086). The area is mainly organised around a (partially excavated) curvilinear street, with a maximum width of 2m, that departs from the city gate in Bey 004–151 and leads northwards to the harbour (Fig. 11.2), cutting through Beys 004 and 113, veering westward in Bey 158 in order to avoid the existing Persian-period cemetery, and then leading north towards the harbour area. In Bey 113, a series of shops and workshops lined both sides of the street, and in Bey 004, a number of rooms on the street functioned as workshops at the southern margin of the settlement (Saghieh 2002, 58, 124; Saghieh-Beydoun 2005, 149).

The areas to the east and west of the street also constituted important public space. To the east, the evidence indicates that the areas Bey 002, Bey 066 and Bey 027 were urbanised at different intervals between the late fourth and early third centuries BC, with accelerated growth towards the second century BC. The excavations in this area revealed a number of residences and shops incorporated into regular *insulae* intersected by small alleys (Arnaud *et al.* 1996; Aubert 1998; 2002; unpublished excavation reports). The western frontage of the street was flanked by a series of shops and artisanal installations that blended with dwellings (Saghieh 1996; Saghieh-Beydoun 2005; Curvers, unpublished reports). The ubiquity of shops and working places in these areas stimulated a busy traffic which was also bolstered by the proximity to the southern gate; moreover, the residential quarters to the east and west of the street would also have engaged in the activity of this thoroughfare.

The street is also significant due to the series of religious places identified in Bey 004/151, Bey 158 and Bey 046, following the route of the street (Saghieh-Beydoun 2005; unpublished excavation reports). As a result, I suggest that this street also functioned as a processional way and hence created a prominent public ritual place. In Bey 004, the recovery of a pit containing a large number of Astarté figurines indicates the location of a religious place. The importance of the religious activities in the area was also exemplified by the construction of a monumental temple in Bey 151 towards the middle of the Hellenistic period, as suggested by the excavation of a platform and associated decorated friezes, and corroborated by ceramic analysis (Saghieh-Beydoun 2005, 151–3). To the west of the platform a room with ovens carved in the rock was revealed, suggesting corporate industrial activities probably associated with the activities of the temple (Saghieh-Beydoun 2005, 156).

The architecture in Bey 158 included a single room shrine constructed around the late fourth-beginning of the third century BC, as indicated by the finds analysis, at the western boundary of a cemetery (unpublished excavation reports). Evidence for pyrotechnical activities coupled with a high concentration of animal bones was associated with the structure, and a channel made partly of water-worn stone delimited its western boundary. In the second century BC, the building was remodelled and annexes were added to the east and west of

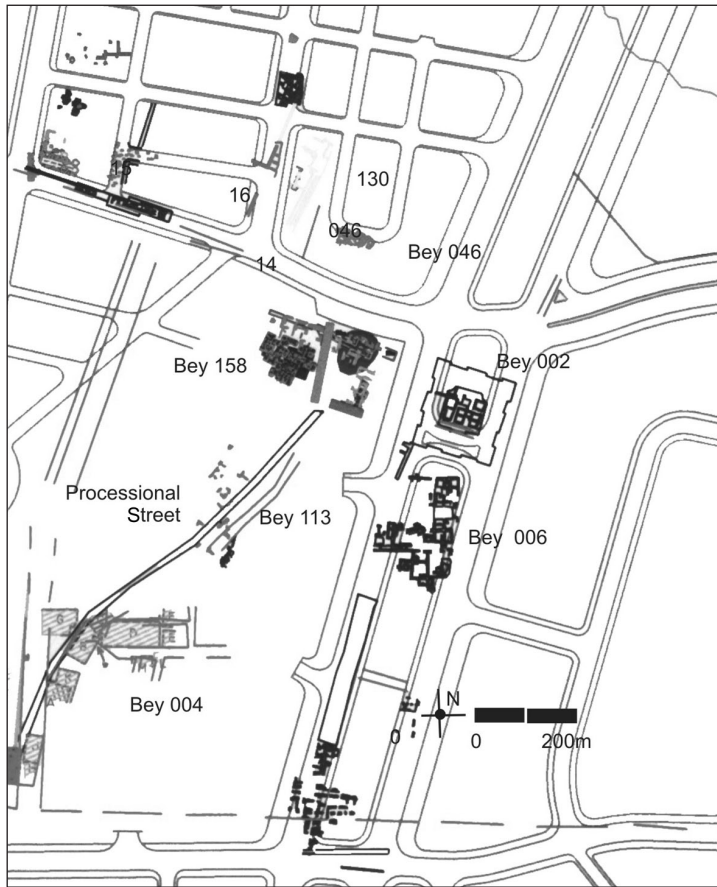


Figure 11.2 The street linking the southern gate to the harbour area.

the original shrine, and parts of the enlarged structure were built on top of the cemetery, though respecting the core of the cemetery. The south-western area was dominated by a number of rooms with silos, whilst the north-eastern area featured kiln installations with ceramic conduits. These rooms must have constituted the working area of the temple, whilst the cubic structure, located in the courtyard, represented the main cultic element.

Beirut's urban identity: continuity or change?

As in the Iron Age, Hellenistic Beirut was a city of trade and this character was manifested in the city's spatial organisation, with its commercial focus. Commercial and working activities emanated from the harbour area and spread across the settlement, as evidenced by the ubiquity of shops and workshops in the different areas. Along with trade, the urban economy was primarily based upon workshop production. For example, chemical analysis

of utilitarian ceramic vessels indicates the existence of pottery workshops in the city (Sapin and Sayegh 1998, 54); in addition, the considerable number of weaving-related artefacts such as loom weights, found in domestic contexts, underlines the importance of weaving and spinning activities in Beirut. These cottage industries of pottery and textile manufacture seem to have been characteristic of Phoenician cities (Markoe 2000, 68). Commerce and production were not restricted to a particular venue in Beirut but were undertaken in different locales and at different levels across the settlement. In particular, the harbour and the south-eastern areas were turned into market places by virtue of the intensive activities undertaken. While the location of some industrial facilities was dictated by topographical and practical requirements, the configuration of the commercial space in Beirut was the result of social and cultural requirements. Trade was not separated from daily life in the city, as illustrated by the blurring of residential and commercial facilities across the settlement.

The number of religious places and their distribution in the city also reveal a prominent religious network that dominated the settlement. This specific organisation communicates the significance and centrality of religion for the inhabitants of Beirut. It reveals the local anchoring of traditions, and in particular, it also highlights the important economic role of religion, as the organisation of the sacred space in Beirut reveals a close engagement between the religious structures and working activities in the city. This confirms Dentzer's (1989, 308–309, 320) argument relating to the continuity of the local governing apparatus in the sanctuaries of Syria and Phoenicia during the Hellenistic period.

The city's local identity was further anchored in the domestic space: house plans in the Hellenistic period followed a well-established tradition dating back into the Iron Age and owed little to Greek models. To date, there has not been any indication of an organisation of domestic space following Greek standards, namely the *peristyle* house. In spite of some discrepancies in scale and spatial arrangements, the basic structure of the dwellings in Beirut did not vary drastically across the site. It mainly drew on two basic house patterns that belong to the Near Eastern matrix. The first, the courtyard house, is composed of a number of rooms organised around an open-air courtyard, while the other type consists of a number of rooms arranged in varied configurations. The arrangement of the courtyard house in Beirut is a local design, which recalls a housing tradition that dates back to the Bronze Age (cf. Dunand and Duru 1962; Braemer 1982; Arav 1989; Markoe 2000). Similarly, the construction techniques also underline how the local geology of Beirut dictated the use of building materials. The building foundations were distinctive: the builders employed water-worn marine cobbles as bedding for the upper ashlar blocks. Moreover, the persistence in using the traditional 'pier and rubble' construction technique (Bey 002, Bey 004, Bey 006) is interesting evidence for continuity with a local past.

The city's layout and the morphology of the house exercise a strong influence on one another. Indeed, it has been argued that the house is a microcosm which encodes a model of the society (Kent 1990; Locock 1994; Allison 1999, 1–2). The Berytian house suited the structure of the society in organisation as well as in economic and ideological terms. Despite size variations, the standard architectural unit in Beirut was predominantly a multi-functional structure which served as both a dwelling and a working place, since

integral to the house were storage facilities and, frequently, shops, as a number of houses included shops and workshops placed at the entrance of the residence (in Bey 006, Bey 010, Bey 018, Bey 066 and Bey 113). This attribute means that overlapping activities were performed simultaneously, or that a range of tasks took place at different times of the day or in different seasons of the year. The organisation and synchronisation of the activities was highly dependent on the social makeup of the households as well as the size of its properties. In the same vein, storage spaces – cubicles or silos – were chief elements of the house and were carefully positioned and deliberately separated from the public sector of the house. The careful planning of storage spaces expresses the high concern to amass provisions, and suggests a range of activities related to the processing of foodstuffs. Similarly, the artefactual evidence testifies to the use of domestic space for the execution of a number of crafts. The multi-functional character of the house in Beirut is echoed in the various entangled activities in the urban fabric and its significant commercial focus.

It is important to recognise, however, that Beirut's social and cultural fabric underwent some modifications within the Hellenistic period, as the second century BC witnessed various changes in the material record in Beirut. As well as a proliferation of imported ceramic material, the dynamics of space show some divergences epitomised in the construction of new urban forms. The establishment of elaborate houses and buildings highlights the continuous restructuring of the urban layout. Along with the construction of lavishly decorated, larger dwellings, the introduction of a gymnasium (Bey 045) by the end of the second century BC (Thorpe 2002, 67–8) constituted a major divergence from the existing local urban framework in Beirut.

These architectural developments correspond historically to the economic boom following the Peace of Apamea in 188 BC. Prosperity was further enhanced by the declaration of Delos' free harbour in 166 BC: given the city's close connections with the Greek island, this surely fostered Beirut's economic fortunes (Arnaud 2002, 190). This economic prosperity is attested by the profusion of imported wares and the growing opulence of ceramic assemblages in the second century BC. The analysis of material remains suggests an increase in contacts with the Mediterranean basin in the Hellenistic period, with the markets in Beirut flooded with a broad range of commodities satisfying the demands and tastes of the inhabitants, providing a wide range of goods at the inhabitants' disposal, as their pantries and kitchens have revealed. Similarly, a range of ceramic products produced in the local region, at Tyre and Sidon, copied imported prototypes during the second century BC, yet remained distinctive in their fabric and selective vessel types (Perring 2002, 135).

However, the (usually tacit) assumptions that the adoption of 'Hellenistic' material culture by the locals marks the transformation of local identities are flawed as they do not reflect the complexity of social reality (Van Dommelen 2002, 129). Far from wholesale adoptions of a new 'cultural packages', different groups made conscious choices about how to engage with the new situation (Kelly 2002, 117). Explaining these material culture changes purely on economic grounds or in terms of emulation is to undermine the active role of the local population in this process. Trade surely introduced novel and exotic products (including Greek pottery) but the inhabitants had the choice whether or not to use these commodities. To

understand this process, it is important to consider the objects themselves, their social contexts and the meanings they embodied (Lyons and Papadopoulos 2002, 8). Choices are evident in the household assemblages, which suggest that intricate processes of adoption, adaptation or even rejection were taking place. Some inhabitants did develop a certain taste for imported items, as their possessions and daily consumption indicate. We can, for example, discern new culinary traditions, as evidenced by the introduction of new types of kitchen vessel. However, these changes were subtle and did not replace the old forms, but were used alongside them.

The conquest, therefore, *did* initiate cultural change but this did not have a major impact on the local character of the settlement. Although new lifestyles might have developed in some elite circles by the end of the second century BC it is doubtful that this seriously changed the local social and cultural identities. A marble plate inscribed in the Phoenician alphabet and dedicated to the Goddess Astarté is firm evidence for the persistence of deep-seated local traditions (Sader 1998, 32). It is my contention that the inhabitants of Beirut were rather able to retain and express a distinct sense of identity even if it was sometimes communicated through Greek forms of expression.

Conclusion

My intention in this paper is not to undermine the idea that any cultural change was initiated by the Greek conquest but to emphasize the need to look beyond the Greek component. Societies are constantly re-defined, but change can be expected to be slow and incremental and highly dependent on the social context (Tilley 1982). I have argued here that the urban development in Beirut was a product of social and cultural priorities rather than a regimented plan implemented by the Seleucids, and that the spatial configuration in Beirut emphasised local urban traditions. Nevertheless, an intricate set of topographical, political and social factors equally played a key role in propelling the city's urban development. The interplay between these different, sometimes contested, requirements created a space unique to Beirut and its society. The urban configuration structured the activities of the inhabitants who in turn left their imprint on the organisation of the different areas. It is interesting how the inhabitants accommodated the new structure according to their cultural traditions and needs.

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